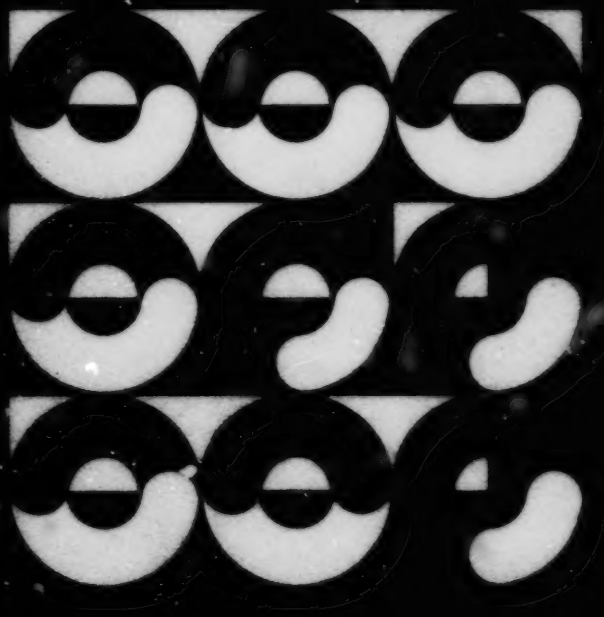

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A FRAMEWORK FOR EVALUATING CANADA'S TRADE MARKS ACT

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The analysis and conclusions of this study do not necessarily reflect the views of the Department.

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FOREWORD

This study represents a major investigation of the functioning of the trade mark system in Canada and provides the conceptual underpinnings for future empirical studies. It utilizes a general public policy perspective and identifies the potential social benefits and costs of trademarks at both a theoretical level and a business practice level. The general analysis does not lead to unambiguous recommendations for changes to the Trade Marks Act nor to the operations of the Trade Marks Office.

While the trade mark is one type of industrial property, it is different from the others to the extent that the Trade Marks Act institutionalizes or formalizes an existing property right, namely the right extended under common law to the owner of a trade mark which has acquired a reputation as a result of its use on goods or services. In contrast, the Patent Act does not institutionalize a monopoly right to an invention, but rather represents a government created monopoly right intended to correct what economists would describe as a "market failure." The objectives in creating the patent right are to encourage innovation and to disseminate the associated technological information. The Trade Marks Act, on the other hand, is designed to establish a uniform system of trade mark rights and, concomitantly, to increase the efficiency in the use of trade marks in the marketplace.

This study is unique in that it attempts a comprehensive socio-economic analysis of the trade mark system as it has evolved in Canada. There have been no previous studies of trade marks by the economics profession, save a chapter in the Economic Council of Canada's Report on Intellectual and Industrial Property.[1] Economic studies have focused on areas such as advertising, profits and market structure. The use of trade marks in advertising was sometimes mentioned in such studies, but it was never isolated as a variable that required independent analysis. Similarly, marketing and consumer behaviour researchers have performed a multitude of studies on brand recognition, brand strength and market share, and consumer brand loyalty. The use of trade marks has been implicitly assumed in these studies, but has not been directly studied. Legal scholars have studied trade marks directly, but they have concentrated on such areas as infringement of trade marks, effectiveness of remedies, anticompetitive practices that have been associated with trade marks and international trade problems associated with goods using trade marks.

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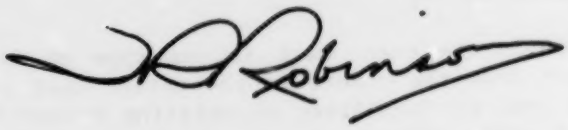
1. Ottawa: Information Canada, 1971.

The authors of the present study have worked to provide a macro-perspective. Because of its scope the study does not have precision of the kinds of microstudies identified above; rather, it provides a framework for a series of socioeconomic empirical studies that will build on past work and take due regard of the legal and regulatory environment. It is from these industry specific or market sector studies that the development of policy recommendations will evolve.



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SUMMARY

This paper presents and discusses an economic framework for evaluating the social welfare effects of the Trade Marks Act. Specifically, the paper identifies the main theoretical linkages between the strength of protection afforded trade marks and allocative efficiency in the domestic economy. It also suggests a research agenda to facilitate a more complete analysis of the social welfare effects of the Trade Marks Act.

Allocative efficiency is identified as the sum of consumers' and producers' surplus. Consumers' surplus may be thought of as the difference between the maximum amount that consumers (in the aggregate) would be willing to pay for the quantity of goods and services they purchase and the amount they actually are required to pay in the marketplace. Producers' surplus may be thought of as profit earned by firms (in the aggregate) over and above the required return to capital.

There are several possible ways in which the use of trade marks can improve consumers' surplus. One is related to the signalling role played by trade marks. The signal provided is that a consistent level of quality can be expected from the producer. As a result, the consumer does not have to spend a significant amount of time and money establishing the quality levels of each anticipated purchase. The benefits to the consumer from such a reduction in the cost of information can be substantial, especially in the case of frequently purchased convenience goods such as soap, toothpaste and the like.

The strengthening of the trade mark property right through the registration provisions of the Trade Marks Act is also likely to encourage a greater rate of new product introduction, on the margin. An increase in product differentiation will, all other things the same, increase consumers' surplus, since (for any expenditure level) consumers are more likely to find goods and services that closely match their own particular tastes and preferences.

To the extent that costs of production increase with additional product differentiation, owing to foregone economies of scale in production, and to the extent that these higher costs are passed on to consumers in higher prices, the net welfare effects of encouraging the introduction of new products are more ambiguous. Indeed, it is possible for the amount of product differentiation undertaken by producers to become excessive if relevant production processes are characterized by economies of scale and if consumers' tastes are relatively homogeneous.

The argument that strengthening trade mark protection would promote an excessive amount of product differentiation is tied to the criticism that advertising is essentially persuasive rather than informative. Frivolous product differentiation would raise purchasing costs to consumers and/or reduce the net earnings of producers, thereby reducing domestic economic welfare. Of course, if entry into domestic industries

were relatively free, producers of low-cost standardized products would enter the market and ultimately force a contraction in the number of product lines being sold. Critics of brand-name advertising argue, however, that such advertising acts as a barrier to entry to new producers, especially to those selling low-cost generic products.

The overall economic effects of strengthening or weakening the legal protection afforded trade marks hinge crucially on the competitive implications of advertising. The economic evidence on this issue is inconclusive and, moreover, suggests that the relationship between competition and advertising may vary across product markets. Given the importance of this issue and that most available studies have been cross-sectional (across industries), it is suggested that potentially fruitful case studies can be conducted of industries where advertising is a major component of competitive strategy. The area of food and consumer household products is particularly interesting, since the introduction of generic goods for many of these products offers a laboratory in which the impact of established manufacturers' brands and retailers' house brands on the introduction of generics can be examined.

The potential for trade marks to be used as instruments for restricting the scope and nature of vertical marketing channels also raises competitive concerns. This issue is complicated by the fact that vertical marketing restrictions can, in some cases, promote the supply of consumer information and point-of-sale services. Empirical analysis of this trade-off also appears to be a worthy exercise. Indeed, if it were determined that the use of trade marks had largely benign (or beneficial) competitive effects, the case for attenuating the legal protection afforded trade marks would be virtually nonexistent.

In addition, if it could be established that attenuating the use of trade marks would (directly or indirectly) reduce the efficiency of consumers in terms of their costs of gathering and processing information, a strong case could be made for more vigorous protection of registered trade marks. A statistical test of the information content of trade marks constitutes a third major research project proposed in the study.

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Chapter I

BACKGROUND TO THE ANALYSIS

Introduction

An inspection of the packaging or media advertising for products as diverse as toiletry articles, home computers, fashion accessories and hotels provides the casual observer with an insight into the widespread commercial use of trade marks in any society. A trade mark is a word or symbol used for the purpose of distinguishing the goods or services in association with which it is used from other goods or services. A registered trade mark is identified by a registration symbol alongside the corporate logo or product name. In Canada the registration symbol indicates that the trade mark is registered with respect to the specific good or service under the Trade Marks Act. Under the Act, only the registered owner or licensed user(s) can use a registered trade mark in association with the goods or services specified in the registration of the mark. The Act prohibits the sale, distribution or advertising of goods and services in association with a trade mark that is confusing with a registered mark.[1]

The Trade Marks Act is typically identified in the economics literature as an element of intellectual property legislation comparable to the Patent, Copyright and Industrial Design Acts. The analogy between the Trade Marks Act and these other forms of intellectual property legislation is, in fact, a subtle one. Specifically, the Trade Marks Act does not confer a property right per se, since protection of a distinguishing mark or symbol is available under the common law as a result of and to the extent of the use of the mark. As will be elaborated upon in subsequent sections of this study, the practical impact of the registration provision of the Act is to strengthen the user's claim over the mark, to facilitate licensing the use of the mark by others and to reserve the opportunity to exploit the mark in geographic regions where the mark is currently not in use.

The main property-right implications of the Trade Marks Act derive from the fact that the provisions for registration under the Act reduce the probability that property rights to a word or symbol having actual or potential commercial value will be attenuated, either intentionally or inadvertently. Intentional misappropriation is discouraged, on the margin, by the fact that a valid registration is sufficient evidence of the existence of a property right in a word or symbol. This feature obviates the need for the trade mark owner to demonstrate under

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1. For a description of the provisions, see the Trade Marks Act, R.S.C. 1970, c. T-10.

the common law that there is significant goodwill attached to the specific word or symbol which was created by the use of the mark by the defendant. Inadvertent misappropriation is discouraged by the existence of a relatively low-cost means of determining whether a valid claim to the mark already exists, that is, the trade mark register.

Thus the critical economic characteristic of the Act is that it enhances an exclusive property right but does not necessarily create that right. The property right in a trade mark is created by the use of a distinguishing word or symbol in association with a specific good or service. Registration of the mark simply confers the right to sue for infringement under the Act rather than under the common law. Thus the Act, strictly speaking, does not create a property right but it does condition the strength and nature of the trade mark property right.

To some extent, however, a similar argument can be made for other forms of intellectual property legislation. For example, successful innovations can be protected by the ingenuity or intricacy of their designs, even in the absence of formal patent protection. Furthermore, the first producer of a product often gains a substantial cost advantage in the marketplace as a consequence of learning by doing. Learning-by-doing and other dynamic economies of scale could serve as an effective barrier to entry even in the absence of legal restrictions on product imitation.[2]

As another example, a performer does not enjoy copyright protection in his or her performances. However, unauthorized commercial use of the performer's persona may be prohibited under features of the common law dealing with passing off and/or unfair competition. The impact of implementing a performers' copyright would also be to strengthen and extend the common-law rights of the performer.[3]

The Trade Marks Act, then, in common with other forms of intellectual property protection, enhances exclusive proprietary rights in specific commercial assets, in effect strengthening the quasi-monopoly positions enjoyed by the owners of these rights under common law or as a result of market forces.[4] While conferring (or strengthening) exclusive

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2. This argument is made with respect to the aircraft industry in Almarin Phillips, Technology and Market Structure: A Study of the Aircraft Industry (Lexington, Mass.: Heath-Lexington Books, 1971).

3. A fuller discussion of common-law protection of performers can be found in Steven Globerman and Mitchell P. Rothman, An Economic Analysis of a Performers' Right (Ottawa: Consumer and Corporate Affairs Canada, 1981).

4. The distinction between monopoly and quasi monopoly is one of degree. A quasi monopoly represents a more limited single-seller position, either because reasonable substitutes exist or because the monopoly status is sustainable for only a short period of time.

rights to specific assets need not always (or even typically) raise anticompetitive concerns, public policy should not intentionally create or extend monopolies or quasi monopolies unless some important public purpose is served by doing so.

In evaluating the Trade Marks Act, it is difficult to describe precisely what activity is to be encouraged. This difficulty was felt implicitly by the Economic Council of Canada in its Report on Intellectual and Industrial Property,[5] which was unable to capture in a single model all the functions of a trade mark, and so ultimately concluded with too narrow a view of its important functions. In the present study, an attempt is made to identify the various functions that a trade mark can perform for consumers and for producers. Some of these functions contribute positively to social welfare, while others do not. Yet it is imperative that any comprehensive study of the trade mark system evaluate all of them.

The Nature and Legal Standing of Trade Marks

A trade mark can consist of words, names or symbols, separately or in any combination, adopted, used or intended to be used by a manufacturer or trader to identify his or her goods or services and to distinguish them from those manufactured or sold by others. A trade mark can only identify the product or service in terms of either the character or quality, or the manufacturing or selling origin. A trade name identifies a firm but can also qualify as a trade mark if it is used as such and performs the function of a trade mark as identifying products or services.[6]

At common law, a trade mark must reflect a certain distinctiveness as to origin with respect to the goods it identifies. More specifically, it is necessary for the owner to submit evidence that might be said to be evidence of secondary meaning. Trade marks that are either coined (without independent meaning, e.g., Kodak) or arbitrary (a common word that is arbitrary as applied, e.g., Apple Computer) ordinarily require less evidence in support of inherent distinctiveness than with respect to words which, although used to identify goods, also provide information about certain qualities of the goods, that is, descriptive words (e.g., Health Bread). Also, in the latter cases, the protection awarded will be restricted to the area in which the mark has acquired the secondary meaning.

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5. See Economic Council of Canada, Report on Intellectual and Industrial Property (Ottawa: Information Canada, 1971), pp. 181-215.

6. Any name can therefore be a trade mark if it identifies the distinctiveness as to origin of a good or service.

Under the Act, "a trade mark is registrable if it is not"

12. (1)(a) a word that is primarily merely the name or the surname of an individual who is living or has died within the preceding thirty years;

(b) whether depicted, written or sounded, either clearly descriptive or deceptively misdescriptive in the English or French languages of the character or quality of the wares or services in association with which it is used or proposed to be used or of the conditions of or the persons employed in their production or of their place of origin;

(c) the name in any language of any of the wares or services in connection with which it is used or proposed to be used;

(d) confusing with a registered trade mark; or

(e) a mark of which the adoption is prohibited by section 9 or 10 [e.g., the Royal Arms, Crest or Standard]....

13. (1) A distinguishing guise is registrable only if

(a) it has been so used in Canada...as to have become distinctive at the date of filing an application for its registration, and

(b) the exclusive use by the applicant of such distinguishing guise in association with the wares or services with which it has been used is not likely unreasonably to limit the development of any art or industry.[7]

Notwithstanding the aforementioned restrictions, any trade mark identified immediately above is registrable under section 12(2) "if it has been so used in Canada...as to have become distinctive at the date of filing an application for its registration."

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7. See the Trade Marks Act, R.S.C. 1970, c. T-10, ss. 12-13. Several proposed revisions to these sections can be found in the Trademark Act, 1979, Bill S-11, 1978-79 (30th Parl. 4th Sess.). It should also be noted that any new revisions will differ in some sections from S-11 because continual modifications are made to reflect the case law and other developments.

A certification mark is a type of trade mark that is used for the purpose of distinguishing from other goods and services those goods or services that are of a defined standard with respect to the character or quality of the goods or services, and/or the working conditions under which the goods have been produced or the services performed, and/or the class of persons by whom the goods have been produced or the services performed. Both trade marks and certification marks indicate to the consumer the existence of a legal entity which has an economic interest in the qualities of the products sold in association with a particular mark.

A trade mark is registered for a period of 15 years from the date of registration. It may be renewed every 15 years without limitation. While protection of either a registered or an unregistered mark against its use or near-use by a rival requires proof of a likelihood of confusion in the minds of consumers, a firm suing for infringement of a registered trade mark does not have to prove existence of goodwill attached to the mark as it would if it were suing under common law.[8] Rather, the right to initiate an infringement action is conveyed directly by presenting a certified copy of the trade mark registration. In the case of famous trade marks -- for example, Coca-Cola -- trade mark protection is preemptive. That is, no one can use the Coca-Cola mark for any purpose without a licence from the owner of the mark. In other cases, expanding the scope of trade mark protection outside the product class pertinent to its registration may require the firm to establish that future use of the mark in other product categories is a logical extension of its current activities.[9]

The rights to a registered or unregistered trade mark can be sold or assigned. Changes of ownership with respect to registered marks may be recorded, although this is not necessary to preserve the validity of the mark or for any other reason. As a practical matter, recordation of a licensee reduces the risk that licensing will damage or destroy the distinctiveness of a mark. The registration gives the owner exclusive use of the mark throughout Canada; however, a trade mark registered in Canada does not provide any rights in foreign countries unless the mark is also registered there. Foreigners may register their trade marks in Canada if the mark is registered and used in the country of origin, or on the basis of use or making known of the mark in Canada. An application may be filed on the basis of proposed use, but registration is not effected until use of the mark begins.

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8. There are no clear-cut standards of proof governing the likelihood of confusion. Proof of actual confusion is ordinarily necessary but not sufficient; however, the absence of actual confusion is not, by itself, proof against infringement. The legal specification of a confusing mark or name is contained in the Trade Marks Act, R.S.C. 1970, c. T-10, s. 6.

9. Other requirements inhere as well such as the responsibility of the owner for the extended goods and services bearing the mark.

The Issues

Stated in its broadest sense, the central policy issue is whether the current Trade Marks Act promotes the public interest, appropriately defined. The intellectual property laws in general, including this Act, grant or extend some limited exclusive right to the originator of a piece of intellectual property, with the intent of allowing that creator to exploit his or her property economically.[10] The basic premise is that, without the increased income available from the exploitation made possible by the intellectual property laws, market processes left completely to themselves would produce or use less than the socially optimal quantity (and possibly quality) of particular types of intellectual output. Intellectual property laws offer increased protection from the appropriation, without compensation, of the effects of intellectual or creative activity; they are thereby intended to promote such creative activity. The laws involve a potential trade-off of higher monopoly, or, more accurately, quasi-monopoly, prices for the consumers or other users of the intellectual output against the encouragement of a (socially more optimal) larger volume production or better use of it.

This is not to suggest that trade mark protection necessarily leads to higher quality-adjusted prices. One of the empirical questions to be addressed is whether the protection of trade marks by statute typically does lead to higher prices or whether, under most circumstances, the enhanced legal protection of trade marks might be associated with lower prices, holding quality constant. It is possible with other forms of intellectual property protection to argue strongly on a priori grounds that the absolute monopoly right does increase price, and that such a price increase, in order to increase the returns to the owner of the right, is clearly an intended effect of the protection. With trade marks, however, it is not so clear. The Act could be aimed more toward the promotion of various forms of market efficiencies, not all of which imply higher quality-adjusted prices.

Stated generally, the central policy issue is whether or not the Trade Marks Act, as constituted, offers social benefits that in a meaningful way exceed any attending social costs. Conceptually, a determination that costs exceed benefits could justify a policy of rescinding protection under the Act. As a practical matter, however, the optimal policy is likely to involve a less extreme solution: to make some modifications to existing policy without either eliminating legal protection of trade marks completely or expanding them indefinitely into all possible applications. Hence, available investigations of the Trade Marks Act tend to focus on potential modifications that affect the scope and nature of the protection afforded registered trade marks.

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10. In the case of the Trade Marks Act, as noted above, the legislation extends protection beyond that available under the common law.

One example of a specific question regarding the scope and nature of trade mark protection is whether the Canadian government should more actively pursue the seizure of counterfeited goods which have entered the country and whether penalties for trading in counterfeit trademarked goods should be increased, as the United States has urged recently.[11] The impact of implementing such a policy would ostensibly be to discourage some amount of counterfeiting, on the margin, and therefore to reduce the private costs to trade mark owners of enforcing their property rights under the law. To some unknown extent, such cost reductions should encourage, on the margin, an increase in the amount of trade mark use undertaken by producers, as well as an increase in the amount of advertising focused on products bearing specific trade marks. Whether these resulting changes are socially desirable depends upon the allocative and distributional consequences of the additional use of trade marks and trade mark-related advertising. If the allocative and distributional consequences are desirable, on balance, this or some other means of strengthening trade mark protection might be appropriate.

Another specific issue that has been raised in the Canadian context is whether the registration provisions should be revised so as to indicate more explicitly the source of origin as well as the qualitative features of a commodity. The Economic Council of Canada has been a notable proponent of the view that the current trade mark system puts no particular pressure on trade mark owners to maintain or enhance the value of the trade mark asset, nor even to stabilize its meaning.[12] The inability of the current system either to identify origin or to convey accurate information about quality is considered by the Council to be a major shortcoming.

A set of issues linked to those raised by the Economic Council of Canada concerns the conditions surrounding the sale or transfer of rights in a registered trade mark. For example, an important question exists concerning the right of a trade mark owner to grant exclusive licences in the use of a mark, as this practice may facilitate opportunities to engage in price discrimination. Whether this and other competitive concerns are sufficient to justify placing restrictions on the proprietary rights of trade mark owners is a major research issue.

In order to analyze these and other issues related to the Trade Marks Act from a social welfare perspective, it is necessary to specify the components of public interest more clearly. The difficulties in identifying increases or decreases in social welfare are well known.[13]

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11. See Martin Dewey, "In Guccis or Gadgets, Counterfeiting Is Big," Globe and Mail, September 19, 1981, p. B.1.

12. Economic Council, Intellectual and Industrial Property, p. 195.

13. See, for example, I.M.D. Little, A Critique of Welfare Economics (Oxford: Oxford University Press, 1959).

Nevertheless, since any public policy initiative can only be evaluated against specific criteria, a specific public interest framework will be proposed in Chapter II.

The evaluation of public policy initiatives must also recognize that different segments of society may not be affected identically by a given policy; in most cases, some people are benefitted (or hurt) more than others. The fact that virtually all public policies are likely to make some individuals worse off, while making others better off, underlies the difficulty in drawing unambiguous conclusions about the welfare implications of given policies. While, in principle, there are no unarguable criteria for choosing among policies that are Pareto efficient,[14] in practice, evaluation of such policies proceeds by introducing, either implicitly or explicitly, distributive judgments.

What Activities Does the Trade Marks Act Promote?

The obvious answer to the question above is that the Trade Marks Act, by strengthening and extending the property right in a trade mark, promotes the creation and use of trade marks to identify goods and services. But this answer really begs several important questions. One is the importance of the Act and the surrounding legal protection of trade marks in stimulating the use of trade marks. A second is the nature of the economic activities that are promoted or discouraged by the increased use of trade marks.

Discussions with trade mark users and with attorneys familiar with trade mark legislation and litigation, a survey of the literature, and casual empiricism suggest several likely effects of trade mark use. These can be divided among effects which primarily impact on consumers, those which primarily affect producers and those which depend intrinsically on the market interaction between producers and consumers.[15]

Effects on markets. The most obvious behavioural effect is that the use of trade marks could reduce the costs (or increase the returns) to producers of distinguishing their products from those of their competitors,

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14. A Pareto-efficient position exists when no change in policy can make any members of society better off without making others worse off.

15. Of course, ultimately all the effects of trade mark use, since they affect goods and services that are traded in markets, must operate through market interactions. For purposes of exposition and analysis, however, some effects can be seen as primarily operating on one or the other of the market participants.

thereby encouraging product differentiation.[16] Although this effect would appear to be intuitively obvious, there is actually little supporting empirical evidence available, nor do any obvious empirical designs for addressing the question suggest themselves. The problem is further complicated by the fact that the effect of differentiation and trade mark use on social welfare may depend on the particular mechanism by which they are related.

The first related question raised by the potential existence of a relation between trade mark use and product differentiation is that of the optimal amount of product differentiation. Another is the effect of product differentiation on market structure. Are markets with differentiated products likely to be more highly concentrated and more difficult for new firms to enter?

The effect of trade mark protection on product differentiation is directly related to the interaction between trade mark use, product differentiation and advertising. While the effect of advertising on such market features as concentration, performance and so forth is familiar in the literature, the first problem to be considered -- whether advertising activity is linked with trade mark use -- is crucial, obvious and hard to prove. The question becomes especially difficult when combined with that of whether the purpose of advertising is to inform or to persuade the consumer. Notwithstanding their difficult nature, these issues must be confronted in any evaluation of the Trade Marks Act.

Two of the more commonly suggested anticompetitive effects of advertising are that the existence of heavily advertised goods can close off entry of potentially competing products, because, at the low volumes which new goods would necessarily command, their per-unit advertising cost would be prohibitive. Another suggestion is that advertising facilitates or encourages price discrimination by allowing producers to segment their markets. For example, similar goods bearing different trade marks could be aimed at different market niches, and the prices would vary according to product image, not necessarily according to other product characteristics.

It is possible that a trade mark, either by itself or in combination with advertising, is a necessary part of the creation and maintenance of a large enough sales volume to support production at a high enough level to take advantage of all available economies of scale. In that case, and assuming that the production economies were ultimately passed along to the consumer, the prices of some goods exploiting trade marks could be lower than prices would be in the absence of trade mark

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16. Demsetz puts it this way: "Trademark privileges may reduce the quantities sold of an existing product, but they may also increase the number of new products enjoyed by customers...." See Harold Demsetz, "Barriers to Entry," American Economic Review 72 (March 1982): 47-57.

protection. The relationship between advertising, trade mark use and the potential size of the market is another important aspect of an evaluation of the Act.

Trade marks also carry information to the consumer. As suggested below, consumers can increase their efficiency in consumption by knowing product characteristics more completely in advance through the combined effects of advertising and trade marks. The full effect of the trade mark is to convey some quantity of information about the product, in what may well be a very efficient form of communication.[17] To the extent that producers are aware of the efficiency value to consumers of the informational content of trade marks, they can exploit that value (up to a limit) by charging higher prices. We hasten to note, however, that there is no presumption that the higher prices charged are necessarily inconsistent with competition or with the improved welfare of consumers.

Effects on consumers. The consumer's problem is described in economics as maximizing the enjoyment, or psychic income, received from the assortment of goods and services (including leisure time) consumed given a fixed budget. (In the jargon, the consumer must maximize utility given a budget constraint.) The use of trade marks could contribute directly to the solution of the consumer problem by promoting efficiency in consumption. It could also affect the consumer directly by becoming a direct consumption item in itself.

The consumer purchases some mix of goods and services which will provide the combination of characteristics he or she chooses to obtain. The process of consuming the goods involves a transformation of goods into utility. The use of trade marks could make a significant contribution to the consumer by helping him or her in advance to identify those goods which are most likely to contain the desired characteristics. This possibility makes consumption more efficient by reducing search time and possibly by affecting the transformation function.

The other direct effect on the consumer could arise where the trade mark of a good provides direct utility for the consumer. The trade mark becomes valued quite apart from the other characteristics the good may possess. One example appears to be certain kinds of initial or animal figure trade marks on clothing.

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17. Ibid. Demsetz, among others, suggests that this information component of trade marks (and advertising linked to trade marks) facilitates entry by new firms. It could also change the incentives of firms to act in an opportunistic manner towards consumers. This possibility is discussed more extensively in Chapter III.

Effects on producers. Three major potential effects of trade mark use primarily impact on the conditions of production or the wealth of producers. These are the effect on efficiency in production, the effect on producers' incentives to produce high-quality output and the effect on the separability of the firm's assets.

Trade marks can affect efficiency in production by creating incentives to diversify production among several different products. This, in turn, could produce a higher unit cost for each product where there are economies of scale in the production of existing goods and where the introduction of additional goods forces the output of each good below the minimum level needed to maintain efficient production.

This argument is dependent on an ancillary assumption that the use of trade marks also has anticompetitive effects. In the absence of such effects, the reduced production efficiency associated with additional product differentiation would induce new firms, offering new products, to enter the market and compete away the sale of the differentiated good. At the same time, trade marks may facilitate reorganizing production among economic units. For example, a high-cost producer might license the use of a trade mark to a low-cost producer. Whether trade mark protection promotes or reduces efficiency in production is at least conceptually open to empirical tests.

If any market where there are significant costs of determining product quality, some producers have an incentive to market lower-quality products as higher-quality products, even at the risk of being discovered as cheaters by consumers. At the same time, efficient producers have an incentive to produce high-quality products as long as they can clearly and convincingly signal consumers that their output is of superior quality.[18] It has been suggested that advertising associated with trade mark promotion functions as a quality signal, thereby increasing the incentive of efficient producers to produce higher-quality output.[19]

Trade marks also can increase the asset value of the firm's products by allowing the rights to use a certain product's trade mark to be transferred without transferring the mark used by the owner with respect to all of his or her products, that is, the house mark. Thus a company making a mass-marketed product (for example, motion pictures, certain children's toys) can separately transfer the right to use its trade mark

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18. Since consumers would willingly pay higher prices to eliminate the possibility of being misled as to quality, firms able to guarantee the honesty of their claims could charge a higher price than producers who sell under manifest conditions of caveat emptor.

19. This argument is extensively developed in Benjamin Klein and Keith Leffler, "The Role of Market Forces in Assuring Contractual Performance," Journal of Political Economy 89 (August 1981): 615-41.

on each of certain specific other products. For example, the owner of the rights to a popular brand of children's crayons has sold a licence to use that mark in a line of children's clothing and accessories. The trade mark owner is able to obtain income from such ancillary uses without selling the complete right to the use of the name, as he or she would have to do if only trade name protection were available.

A more common situation occurs when a company sells off part of its business, including the trade marks for use exclusively in connection with that part. For example, a baby food company with interests in other markets recently sold to another company the right to use its trade mark for baby foods but not for any other product. It is to be expected that this flexibility in sale of a company's trade mark rights will increase the value of the company's existing trade marks and might also stimulate the introduction of new products.

Overall Impact of the Act

In principle, it is desirable to evaluate all the aforementioned effects simultaneously, using a comprehensive general equilibrium model, which includes both consumers and producers. In practice, most available models are not broad enough to encompass and permit evaluation of all the potential effects; moreover, any such model would probably be excessively complex and unwieldy. In light of the fairly limited economic analysis of trade marks, performed to date, it seems a worthwhile exercise to enumerate and describe the potential effects in a comprehensive fashion, and then try to identify which effects are, in fact, important. The policymaker would then have a better awareness of the critical relationships affecting the welfare effects of trade mark protection, as well as a sense of which are more or less important. Of course, those interaction effects between relationships that are potentially significant must not be ignored. But useful insights in this area are attainable without the use of full-blown general equilibrium models.

Chapter II

POLICY CRITERIA

Introduction

By choosing criteria that reflect overall social welfare effects, the critical relationships which condition the net social benefits of the Trade Marks Act can be identified. The following analysis considers the criteria related to allocative effects, distributive effects and the question of fairness.

Allocative Effects

Allocative efficiency

1. General considerations. Allocative efficiency concerns the optimal use of the resources available in order to achieve the maximum aggregate income. A set of conditions in output and factor markets can be described which theoretically guarantees that total output is maximized for any initial distribution of wealth.[1] However, a practical difficulty is that these conditions must be met in all markets in order to ensure income optimality. If, for any reason, the stringent conditions are not met in any market, there are no general rules which then guarantee optimality.[2] Common deviations from the conditions are the existence of noncompetitive prices and output determination, and differences between social and private valuations. These make it very unlikely that the optimum conditions are met in all markets. If the optimal conditions were met in all but one market, then it is clear that forcing competitive behaviour (that is, forcing the remaining market to meet the conditions) would produce the optimal allocation. However, where the

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1. An exposition of these conditions is provided in several economics books, for example, Jack Hirshleifer, Price Theory and Applications (Englewood Cliffs, N.J.: Prentice-Hall, 1975).

2. The conditions which must then be invoked are treated under the general theory of second best, which shows that the adjustments necessary to ensure optimality depend on the particular circumstances of the departure from the optimal conditions. The seminal article in this literature is R.G. Lipsey and K. Lancaster, "The General Theory of Second Best," Review of Economic Studies 24 (February 1956): 11-32. The logical inconsistencies of second best arguments, where distortions are created through the political process, are discussed in Michael McKee and Edwin G. West, "The Theory of Second Best: A Solution in Search of a Problem," Economic Inquiry 19 (July 1981): 436-49.

conditions are not met in several markets it cannot be assumed that a movement to competitive output and pricing in one of them will, perforce, produce an improvement in overall allocative efficiency. In short, it is invalid to assume that a policy which moves one sector of the economy closer to a competitive output solution necessarily improves aggregate allocative efficiency.

An additional complication in performing welfare analysis is introduced by the fact that different output positions are not strictly comparable if they are associated with different wealth distributions in society. That is, even when a policy is implemented that results in an unambiguous increase in total (i.e., economy-wide) output and leaves everyone better off, or at least no worse off, than they were before, the improvement in welfare is unambiguous only for the distribution of wealth extant when the policy is implemented. If value judgements about the distribution of wealth are allowed to enter the analysis, it is possible that a policy change which increased everyone's income would not represent an unambiguous improvement in social welfare because the distribution of wealth extant prior to the change was not socially acceptable.[3]

It has been widely recognized that a strict application of these stringent theoretical limitations would severely restrict the usefulness of most policy analysis exercises, since identification of unambiguous improvements in allocative efficiency would be virtually impossible. It is also recognized, however, that policy initiatives taken in ignorance of their allocative impacts may be quite damaging to the social interest. Thus the strict criteria for defining improvements in social welfare are generally relaxed, allowing comparisons of what have been labelled "lower-level" optima.[4]

Comparisons of lower-level optima involve several facilitating assumptions. One is that policies affecting prices and output in one sector of the economy have, at most, marginal impacts on costs and prices in other sectors. Another is that policy changes which allow for everyone to be made better off through a redistribution of resulting gains represent potential improvements, whether or not such redistribution actually takes place. In effect, allocative and distributive considerations are treated as being weakly separable, in that one does not ordinarily test whether the payment needed to compensate individuals made worse off by any given policy is sensitive to the initial distribution of wealth prior to the policy. This is not to say that a policy's impact on the distribution of income is irrelevant. Rather, the policy

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3. For example, society may have been characterized by an excessive amount of poverty.

4. This term is used in E.J. Mishan, Welfare Economics (New York: Random House, 1964), p. 121.

analysis ordinarily accepts the existing distribution of social wealth and evaluates both: (1) whether a proposed policy will make this distribution more or less equal, and (2) whether it will increase overall income.

Policies likely both to increase aggregate income and to produce a more equal distribution are preferable, ceteris paribus, to policies promising the same income increases but a less-equal distribution of the resulting income.

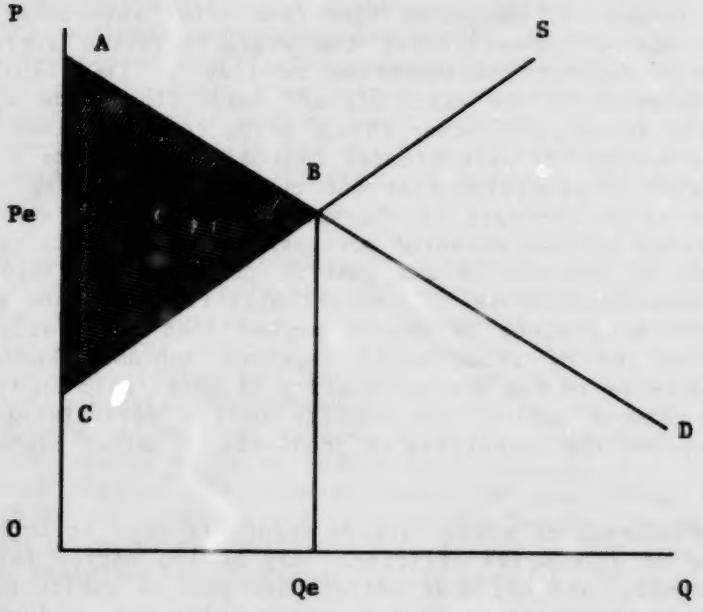
2. The surplus concept. The discussion so far has focused on the total of monetary income, which relates to the total of goods and services available in the economy. However, while potential increases or decreases in monetary income are a relevant measure of allocative efficiency, they do not measure an individual's total well-being. Total well-being is considered in the economic concept of total utility, or the consumer's total psychic income in terms of the satisfaction obtained through the consumption of goods and services. In this regard, it is relevant to note that a person may derive satisfaction from such reservation uses of his or her resources as the leisure use of time instead of maximizing market income. This consideration is of particular relevance in evaluating the Trade Marks Act, since one presumed benefit of the Act is to reduce the amount of time (and other resources) the consumer must devote to investigating the characteristics surrounding a given purchase. Another consideration is that an individual's well-being will be related to the exact mix of consumption goods bought. It is reasonable to assume, all other things being constant, that consumers in general are better off with greater choice. In terms of the present analysis, it will be suggested that one outcome of encouraging the use of trade marks is an increase in the variety of products available. A further difference between measured monetary income and total utility is that there can be changes in the quality of goods and services produced. This consideration is also potentially relevant when evaluating the Trade Marks Act, since it can be argued that the availability of information conveyed by trade marks improves consumer knowledge and leads to an increase in the average quality of goods sold in the marketplace. As a related notion, the ability to tie advertising to trade marks could improve the incentives of producers to market higher-quality products.

One implication of these considerations is that strictly income-based measures of allocative efficiency may be too narrow for purposes of policy analysis. Indeed, most welfare analyses of public policy initiatives rely on the concepts of consumer surplus and producer surplus to evaluate the allocative implications of a specific policy. While these concepts are, in principle, straightforward, they are, in practice, difficult to measure.

Figure 1 illustrates and explains the concepts of consumer and producer surplus. The supply and demand curves for a good X are given as S and D, respectively.[5] The equilibrium output rate and price (OQe and OPe, respectively) are determined by the intersection of S and D. Consumers' surplus is defined as the difference between what consumers would be willing to pay for each quantity purchased and the price charged by the market when aggregated over total quantity purchased. It can be measured as triangle ABPe. Producers' surplus is defined as the difference between the minimum price a producer would be willing to accept at each quantity supplied and the price the market offers him or her when aggregated over total quantity sold. It is shown as triangle CBPe. The algebraic sum of total surplus -- that is, consumers' surplus plus producers' surplus, or triangle BAC -- is a conventional index of allocative efficiency in policy analysis. More surplus is better.

Figure 1

Consumer and Producer Surplus



5. The functions in Figure 1 are, for convenience, drawn as straight lines with explicit intercept terms. They are also assumed to be aggregate functions, showing the effect of all consumers and producers, so they may be taken as market functions.

As a qualification, it should be noted that the exposition of the concepts in Figure 1 does not allow for changes in the nature or qualities of the output produced. That is, output units measured along the horizontal axis are presumed to be homogeneous. However, changes in the characteristics of products are an integral feature of the marketing activities of firms and represent a principal result of the introduction of new brands. For purposes of analysis, product variety is therefore incorporated as a component of social welfare, that is, as a contributor to aggregate social surplus.

3. Product characteristics. An approach to demand analysis that incorporates product features is outlined in Figure 2.[6] In this approach, goods are defined in terms of their attributes, qualities or characteristics. For example, if the good in question is an automobile, characteristics might include fuel efficiency, seating capacity, number of doors and so forth. The consumer does not want to consume products per se, but rather buys products in order to obtain some desired set of characteristics. Thus the car buyer looks not for some particular car, but rather for that car which provides a whole range of characteristics which he or she wants to consume. In this way, the consumer must always transform the goods that are purchased into the characteristics desired. In general, since most goods have multiple attributes that are combined in fixed proportions, consumers will be forced to buy some characteristics they do not want in order to get those they do want. To continue the automobile example, a consumer may buy a car with power steering only because that feature comes in combination with others on a particular car that otherwise best meet his or her needs. Similarly, a product's packaging could be of little or no interest, but the consumer must buy it to obtain the product.

Clearly, the more products available that closely match a consumer's optimal mix of characteristics, the better off that consumer is. If a new product is introduced, containing a different mix of characteristics from all existing ones, then (under some fairly general assumptions about the nature of consumer wants) that new product will represent an improvement for at least some consumers, namely, all those for whom the new product is closer to their ideal than is any existing product. Clearly, then, the introduction of any new product improves welfare for at least some consumers.[7]

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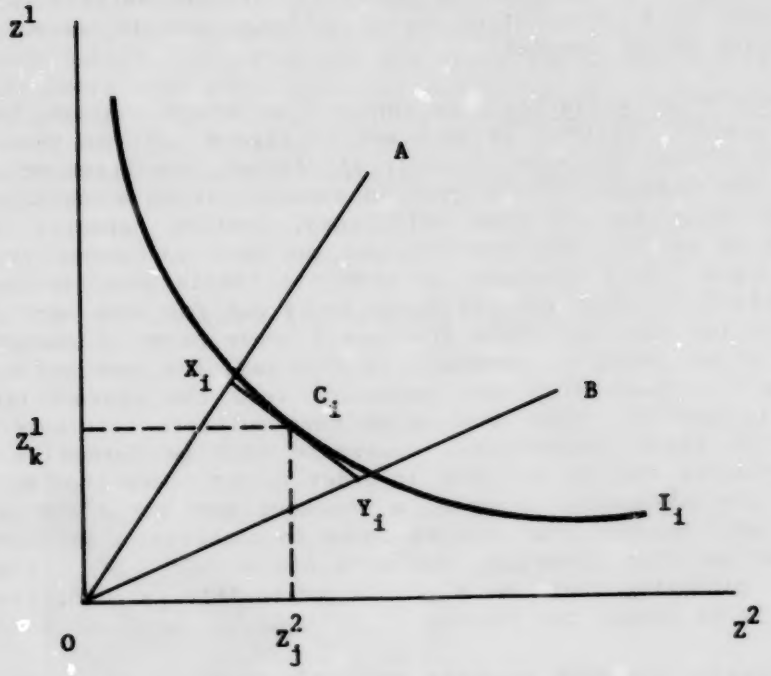
6. For a full description of this model, see Kelvin Lancaster, "A New Approach to Consumer Theory," Journal of Political Economy 74 (April 1966): 132-57.

7. For a complete analysis of this situation and the introduction of a more formal model, see Steven Globerman and Mitchell P. Rothman, "An Analysis of the Industrial Design Act," mimiographed (Report submitted to Consumer and Corporate Affairs Canada, 1981).

Figure 2

The Product Characteristics Model



Note:

Two goods, X_i and Y_i, provide characteristics Z^1 and Z^2 in the proportions given by slopes OA and OB, respectively. Given an available budget, the consumer is presumed to be able to purchase along the line X_i Y_i in the Z^1Z^2 space. Given indifference curve I_i, the consumer will choose point C_i, which provides a combination of X_i Y_i giving rise to a characteristics vector Z^1_k, Z^2_j.

4. The concept of efficiency in consumption. There are several potential ways in which trade marks can increase consumer welfare as defined by the product characteristics model. For example, trade marks could make it cheaper for consumers to produce characteristics Z^1 and Z^2.

The concept of the production of characteristics is developed in models of consumption efficiency.[8] The essence of these models is that the vector quantity of any given set of characteristics $\{Z_i\}$ realized by a consumer depends on the vector of the set of goods and services consumed, $\{X_j\}$, the time spent (T) in acquiring $\{X_j\}$ and converting the goods vector into the characteristics vector, and the quantity and quality of information, or expertise (I), the consumer possesses about the production process. Since $\{X_j\}$ is also the output of some production process, the prices of the various components of that vector will depend, in turn, on efficiency levels in prior production stages.[9]

Time is ordinarily both a direct and an indirect input into most consumption activities. It is a direct input because the act of consumption ordinarily takes time, for example, attending the theatre, eating food, driving a car and so forth. It is an indirect input because the consumer usually must spend some time searching for goods and services capable of yielding one or more desired elements of the $\{Z_i\}$ set. The consumer also often needs time to learn how to convert the $\{X_j\}$ set into the desired $\{Z_i\}$ vector. For example, unless the consumer knows something of how to operate and maintain an automobile, he or she will probably derive very little satisfaction (along most relevant dimensions) from buying a car.

Finally, given any value of T, the consumer is more likely to optimize in the characteristics space, the more knowledgeable he or she is about the underlying production process and about the qualities of the elements of $\{X_j\}$. In the literature, this expertise (identified above as I) is often referred to as human capital. For example, it is argued that efficiency in consumption is positively related to education, since education is presumed, among other things, to enhance one's ability to structure alternatives logically and to separate relevant from irrelevant information.[10] This superior ability might help individuals to make a better selection of $\{X_j\}$. A more knowledgeable person, for example, might have been better able to foresee the rapidly escalating costs of energy and the consequently higher relative (as well as absolute) costs of owning a full-sized car. As another example, lack of knowledge about the qualities of alternative birth control devices will certainly influence the ex post satisfaction associated with the love-making activity. Expertise might also result in a more efficient

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8. See, for example, Robert Michael, The Effect of Education on Efficiency in Consumption (New York: Columbia University Press, 1972).

9. The distinction between $\{Z_i\}$ and $\{X_j\}$ is essentially one of stage of use. Specifically, the final user is concerned with maximizing on $\{Z_i\}$. Note that the final user in this sense, although identified as a consumer, could in fact be an industrial buyer.

10. In its broad construct, human capital encompasses not only formal education, but also on-the-job education and/or other forms of experiential learning.

combination of $\{X_j\}$ with T. For example, having once painted a house, it is likely that repainting will require less wasted paint and less time.

The consumer's production relationship described above can be summarized in the functional form given as equation (1):

(1) $\{Z_i\} = g(f\{\overline{X}_j\}, T, I)$

The first term in parentheses is identified as itself being a function, since, as noted above, goods and services which are inputs to the consumption process are themselves the outcome of production processes, where $\overline{X}_j$ are the inputs to the relevant processes.

This model can, along with the characteristics model of consumption, help identify the effect of changes in the efficiency of consumption. For example, where the production processes used in making $\{X_j\}$ become more efficient and the goods become correspondingly cheaper, the consumer can then obtain more of the goods for the same budget expenditure and receive more satisfaction in the form of a higher value of the characteristics vector. The consumer would, in other words, reap some increased consumer surplus from the units of the good he or she is now able to enjoy at a lower price. If some or all of the cost savings are held back from the consumer, they would show up as increased profits for producers or, equivalently, increases in producers' surplus. Assuming away distributional problems, such increases in either producers' or consumers' surplus (or both) represent unambiguous increases in social welfare. Similarly, any change which made consumers better able to choose or to transform goods -- that is, any change which would increase the value of the function for any given vector of inputs -- would produce an unambiguous increase in social welfare, whether the gains were actually passed along to consumers or were entirely captured as producers' surplus. Such a change could come about if either the amount of T needed for a given consumption activity is reduced while other inputs stay fixed, or if the form of the function changes so that it produces a higher value for a fixed vector of inputs.

5. Trade marks and efficiency in consumption. This rather abstract discussion has some immediate relevance to the analysis of the effect of trade mark use. First, trade marks may be thought to add directly to the store of consumer information, I, without imposing additional time costs. Second, they could reduce the time spent in search, T, for any given consumption decision. As noted above, such changes would be unambiguous increases in total welfare, even if their economic value were, because of the structure of the product markets, totally absorbed by the producers.

The literature on trade marks suggests that an important function of trade marks is in fact to promote more efficient purchasing behaviour on the part of consumers. One such statement of this position is provided by the Economic Council of Canada:

> To the degree that trademarks add to buyer information... they open the way to more efficient purchasing decisions....[i.e.,] expenditures of of any given amount are likely to yield greater satisfaction. The time spent in searching for satisfactory products may also be reduced....It is this improvement in decision-making as fewer wasteful and disappointing expenditures are made — an improvement ultimately reflected in...the composition of output -- which is a basic economic argument for a strong and effective trademark system.[11]

The Council is effectively suggesting that trade marking reduces T and also facilitates a more judicious choice of the elements of $\{X_j\}$.[12] As noted above, these improvements in efficiency would, all other things constant, contribute to an increase in social welfare. Such increases, by themselves, might not be sufficient to justify the extension or strengthening of trade mark protection, since the costs of such an exercise might exceed the benefits. Costs would certainly exceed benefits if, as some observers argue, the kind of trade mark proliferation encouraged by trade mark protection is frivolous and does not reliably signal to consumers the quality of branded products.

6. Trade marks and product differentiation. To the extent that trade mark protection encourages product differentiation,[13] it might, under certain circumstances, promote increased consumer welfare by encouraging greater variety in the goods and services available. In particular, trade mark protection could indirectly encourage the marketing of higher-quality products. It is easy to show that, all other things constant, increased product variety promotes consumer welfare. In general, a new product will offer characteristics that are closer than those of existing products to at least some consumers' ideal mix. Product differentiation is most likely to increase consumer welfare when

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11. See Economic Council of Canada, Report on Intellectual and Industrial Property (Ottawa: Information Canada, 1971), pp. 192-93.

12. For a more rigorous treatment of this issue within the context of the characteristics model, see S.C. Calantoni, O.A. Davis and M. Swaminuthan, "Imperfect Consumers and Welfare Comparisons of Policies Concerning Information and Regulation," Bell Journal of Economics 7 (Autumn 1976): 602-15.

13. While it is a conventional wisdom among marketing executives that trade mark protection encourages product differentiation, this result does not necessarily follow from market structure models of advertising, as will be discussed in Chapter III. The perspective of marketing executives on the trade mark-product differentiation relationship was provided by Mr. George Bailey, Vice-President Marketing, Woodwards Ltd., in a conversation with Steven Globerman.

tastes vary widely across consumers and when characteristic ratios differ in a substantial way across available goods and services. The more the existing products blanket the possible choices, the more limited are the opportunities for introducing new products that will allow the consumer to realize higher surplus. Indeed, it is possible for the amount of product differentiation undertaken by a set of producers to become excessive if relevant production processes are characterized by economies of scale and if consumers' tastes are relatively homogeneous.[14]

The potential for product differentiation to become excessive exists even when true objective differences exist in the characteristics of branded goods. The concern becomes manifest if, as some critics strenuously argue, many goods bearing different marks are identical in all relevant aspects, notwithstanding the substantial amounts of advertising aimed at establishing significant differences in product attributes.[15] A similar criticism maintains that advertising tied to brand-name products is essentially persuasive rather than informative, and is undertaken by sellers primarily to reduce the degree of substitutability between their products and those of actual or potential rivals,[16] and/or to facilitate price discrimination. This latter view suggests that if strengthening trade mark protection promoted additional use of trade marks and associated advertising, the primary result might be a transfer of income from domestic consumers to foreign-owned and domestically owned producers. What is more, real resources would be expended as sellers engage in this rent-seeking behaviour.

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14. This point will be developed further in Chapter III. An extended discussion of the welfare gains from the introduction of new products and of the excessive product differentiation argument is provided in Globerman and Rothman, "Industrial Design Act."

15. For an especially rancorous critique of the wastefulness of brand-name advertising, see David Morris, "Some Economic Aspects of Large-Scale Advertising," Journal of Industrial Economics 24 (December 1975): 119-30.

16. For example, see Frederick Scherer, Industrial Market Structure and Economic Performance (Chicago: Rand McNally, 1970), pp. 329-32. As noted in Benjamin Klein and Keith Leffler, "The Role of Market Forces in Assuring Contractual Performance," Journal of Political Economy 89 (August 1981): 615-41, the information conveyed by advertising may simply be that the firm can afford to advertise because consumers are willing to pay a high markup over costs of production. This willingness, in turn, reflects the firm's commitment to produce qualitatively superior products. This argument will be examined more fully in Chapter IV.

To the extent that price discrimination or other manifestations of imperfect competition transfer income from consumers to domestic producers, the overall measure of economic welfare, that is, producers' plus consumers' surplus, need not decrease.[17] However, to the extent that a substantial percentage of domestic trade marks are held by foreigners, the transfer of income from domestic consumers to foreign producers can be seen as a reduction of Canada's economic welfare.[18]

Productive efficiency. Another possible implication of the effect of trade marks on market structure relates to their potential impact on efficiency in production. In the terminology to equation (1), trade mark protection could raise (or lower) the costs of $\{X_j\}$ by contributing to reduced (or increased) efficiency in the $f\{\overline{X}_j\}$ process. The extent to which trade mark protection leads to reduced levels of competition, and subsequent reductions in production efficiency, is an important issue in any analysis of the Trade Marks Act. Of course, trade mark protection could also increase competition, with potentially benefical effects on productivity.

Trade mark protection can impact more directly on the efficiency of the $f\{\overline{X}_j\}$ process by encouraging or facilitating the reorganization of production into more efficient forms. For example, trade mark protection could facilitate franchising and other forms of decentralized production. To the extent that such decentralization promotes efficiency in the $f\{\overline{X}_j\}$ process, it contributes directly to an improvement in consumption efficiency. In consumer durables, for example, it is often the case that a nationwide manufacturer subcontracts the production of specific products to independent manufacturers. Such subcontracting facilitates specialization in production and, presumably, the capture of product-level economies of scale. Trade mark registration encourages subcontracting by providing protection (beyond that available under the common law) to the original producer from loss of his or her rights in the trade mark to the subcontractor. It also allows the original producer to diversify his or her portfolio of products rather than identify all products produced under a common house-name. More specifically, the producer of a range of products can selectively disassociate experi-

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17. Since price discrimination is a manifestation of barriers to entry and imperfect competition, this issue will be discussed more fully in Chapter IV.

18. In some models, advertising increases the power of manufacturers vis-à-vis retailers. Again, to the extent that income is transferred from domestically owned retailers to foreign-owned manufacturers, the transfer can be seen as a reduction of Canada's economic welfare. For an analysis of the role of advertising on the retail market structure, see Michael Porter, Interbrand Choice, Strategy and Bilateral Market Power (Cambridge: Harvard University Press, 1976).

mental brands from his or her established lines, thereby reducing the risks associated with changing the characteristics of the established products or subcontracting the production process to an arm's-length producer.

Summary of the allocative efficiency considerations. A substantial amount of debate surrounding the Trade Marks Act converges on the issue of whether competition through product differentiation and advertising tied to trade marks, on balance, promotes efficiency or whether it is a socially wasteful activity whose primary effect is to redistribute income in society. The complexity of this issue is enhanced by the fact that it is clearly tied to the efficiency consequences of advertising as the latter impacts on competition among sellers. For example, even if a new product were not substantially different from existing products in the market, its introduction might precipitate a breakdown of implicit forms of cooperation among existing producers,[19] with attendant long-run benefits for consumers. On the other hand, the introduction of a wildly successful new product might convert a monopolistically competitive industry into one that might be defined as a dominant-firm structure. In summary, the short-run social benefits (or costs) of product differentiation may or may not be consistent with the long-run costs (or benefits). Where they are inconsistent, a calculation of the net present value of the differing streams of net benefits is required.

The conventional measure of allocative efficiency employed by welfare economists is the sum of domestic economic surplus, that is, consumers' plus producers' surplus. Trade mark protection under the Act can enhance domestic economic surplus by promoting what we have identified as efficiency in consumption. This could arise in a number of ways, for example, through improved consumer information (both in terms of quantity and quality), increased product differentiation and increased competition among producers. Clearly, it would be necessary to net out the costs associated with implementing and administering the protection of marks when evaluating the impact of enhanced trade mark protection under the Act. However, the costs of maintaining the system are probably quite small compared to private expenditures on introducing new products, particularly those related to advertising. The critical empirical issues in relation to the allocative implications of trade mark protection concern the effects mentioned in Chapter I. In what ways do trade marks affect the cost to consumers of obtaining reliable information about the attributes of products? Does trade mark protection promote product differentiation? How does it affect competitive conditions in relevant markets? These allocative issues will be seen to be intertwined.

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19. The tobacco industry appears to provide an illustration of this phenomenon. See R.B. Tennant, "The Cigarette Industry," in Walter Adams, ed., The Structure of American Industry (New York: Macmillan, 1961), pp. 326-59.

Distribution of Income

As noted earlier, public policy analysts, as a practical matter, ordinarily separate allocative and distributive welfare criteria. Policies which improve the distribution of income are preferred to those which do not, ceteris paribus. These two criteria are separated because unambiguous comparisons of alternative allocative solutions are impossible without taking the existing distribution of income as given. Despite this conceptual separation, a policy which improved allocative efficiency (i.e., increased overall surplus) but substantially worsened the distribution of income (i.e., made it substantially less equal) would probably not be considered a welfare improvement. The increased surplus would have to be redistributed to give a more equal sharing of the resulting benefits before most analysts would recommend the policy. On the other hand, a policy which resulted in no significant change in aggregate income but accomplished a redistribution of income from high- to low-income groups would, given an egalitarian ethic, be considered a welfare improvement, other things constant.

The Trade Marks Act, or some other form of proprietary protection of trade marks, might therefore be considered a welfare-improving public policy if it made a substantial contribution toward improving the distribution of income, holding allocative considerations constant. Evaluating the distributive effects of any specific policy is ordinarily complicated by the fact that the incidence (i.e., the distribution of benefits and costs) of a policy is difficult to identify. In the case of a policy intended to promote stronger property rights in a trade mark, the distributive effects are complicated by the distinction between Canadian and non-Canadian residents. Indeed, the implications for wealth transfers between nationals and non-nationals is of primary importance in this context, since the wealth transfers between nationals attending any specific policy can presumably be offset by appropriate taxes and/or general income transfers.

It might be argued, for example, that the primary distributional effect of attenuating the rights of trade mark owners in Canadian markets involves a transfer of income from shareholders in large multinational companies to some set of Canadian producers and/or consumers. Perhaps the most dramatic example of attenuation is successful counterfeiting of trade marks, but any restriction on the ability of foreigners to exploit the revenue potential inhering in a trade mark could potentially transfer income to Canadians. Whether, for example, Canadian consumers are, on balance, net beneficiaries of the illegal appropriation of the trade marks of large multinationals is uncertain. Clearly, if consumers can, at relatively low cost, distinguish counterfeits from originals, they might actually be benefitted by the opportunity to buy copies at prices below those bearing legal marks. On the other hand, if Canadian consumers are deceived by fakes, or if they must assume significant search costs if they are to identify counterfeits, Canadian consumers could suffer welfare losses from the counterfeiting of trade

marks.[20] Since there is no convincing evidence on the ability of consumers to discriminate between counterfeit and authentic trade marks, one cannot assume that the counterfeiting of trade marks of multinationals provides benefits to Canadian consumers,[21] although the benefits to low-income consumers who could not afford the authentic goods in any case might be positive.

In summary, if a trade mark indeed provides valuable information to purchasers, counterfeiting or some other such form of attenuation of the trade mark property right could effect a transfer of income from Canadian consumers and retailers to (primarily) foreign counterfeiters. This is more properly accounted for as a decrease in allocative efficiency, since it represents a decrease in total domestic surplus. The purely distributive effects in fact could even be progressive, on balance, if lower-income consumers benefit (because they could not afford the authentic branded good) while middle- and upper-income consumers lose.[22] On the other hand, if lower-income consumers would also prefer to buy a high-price original rather than a low-price fake, the pure redistribution effect might be regressive, because search costs could go up relatively more for lower-income consumers. In any event, building a case for weakening property right protection of trade marks based upon redistributing income founders on grounds that more direct redistribution schemes are bound to be more effective and efficient.

A potential redistribution argument for reducing trade mark protection also arises from the possibility that such a reduction would enhance competition. While the allocative effects of increased competition are likely to promote economic surplus, as discussed above, the impacts on income distribution are more uncertain. For example, it is unclear whether, as a percentage of total income, the costs of goods

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20. The primary beneficiaries in this case may be the producers doing the counterfeiting. Authorities suggest that the origin of counterfeited goods is primarily low-wage countries, especially Hong Kong, Taiwan and South Korea. See Martin Dewey, "In Guccis or Gadgets, Counterfeiting Is Big," Globe and Mail, September 19, 1981, p. B.1.

21. According to buyers for department stores, counterfeit jeans and tops usually can be spotted by their inferior workmanship, even though the quality of some designer goods is not consistently high. However, most consumers do not bother to inspect purchases closely enough and therefore do not know they have been duped until it is too late. Even some retailers apparently buy fakes unwittingly, although others sell fakes knowingly. See Susan Harrigan, "Apparel Designers Aren't Flattered by Imitation," Wall Street Journal, June 4, 1981, p. 48.

22. Ibid. Since in retail stores, fake items may cost almost as much as the real thing, the expanded choice set for low-income consumers may be quite limited.

bearing well-known trade marks would decrease more for upper-income or lower-income groups. Furthermore, it is uncertain which groups in society are capturing the rents associated with restricted competition levels in domestic industries. Theory suggests that, in the long run, economic rents will be captured by the factor(s) of production having the most inelastic supply curve(s).[23] In certain cases, these might be unionized workers; in others, they might be skilled marketing managers or some other scarce administrative input. While it is unlikely that such groups would earn below-average incomes, the fact that the beneficiaries may vary across relevant industries complicates the distributional analysis.

Another potential redistributive effect which could be especially relevant for Canada, due to the high degree of foreign ownership and the large spillover effect of advertising from other countries (particularly the United States), is the possibility that Canadian trade mark protection allows foreign-owned firms to obtain rents in Canada from their foreign operations. Such a redistribution of income from Canadians to foreigners could only take place if several conditions are met. First, trade marks must create or protect rents for the producers of differentiated products. Second, the recipients of the rents associated with such products would have to be companies controlled by non-Canadian residents. Finally, there must actually be some effect in Canada of advertising or other product differentiation efforts undertaken elsewhere.[24]

In summary, a comprehensive evaluation of the distributive implications of alternative trade mark protection policies is a formidable task; however, it seems plausible to conclude that any policy effecting a transfer of income from consumers in the aggregate to a narrowly based group of producers, managers or workers is per se undesirable, notwithstanding that the transfer might be reversible by more general fiscal instruments such as taxes or transfers. Hence, there may be no real need to undertake the extensive, and probably inconclusive, analysis required to identify precisely the net beneficiaries of varying degrees of trade mark protection. If any given level of protection can be shown to have substantial anticompetitive consequences, it is also likely to have adverse distributional consequences. On the other hand, if the Act, on balance, promotes allocative efficiency, the distributional consequences, at worst, are likely to be benign. Since the distributional

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23. For a lucid discussion of this point, see Jean-Luc Migue, Nationalistic Policies in Canada: An Economic Approach (Montreal: C.D. Howe Research Institute, 1979), pp. 81-84.

24. Some positive evidence on this effect is provided in Lindsay Meredith, "United States Multinational Investment in Canadian Manufacturing Industries," Review of Economics and Statistics, forthcoming.

consequences of the Trade Marks Act are likely to derive from the competitive consequences of the legal protection of trade marks, separate analysis of these specific distributional consequences does not seem warranted.

Fairness

Intellectual property right protection is often defended on grounds of fairness or on grounds that creators have a natural property right in their own ideas. In the case of trade marks, it might be argued that appropriation of the goodwill that is attached to a trade mark is tantamount to stealing and, therefore, society is morally obligated to protect this property right.

Economists generally have very little to say about fairness as a social goal. Most economists adopt the view that, all other things being equal, public policies should strive for horizontal equity; that is, individuals in like circumstances should receive like treatment.[25] In this regard, it would appear that existing trade mark owners have some claim for protection under the Trade Marks Act. Specifically, owners of trade marks who have invested a substantial amount of time and money developing goodwill possess in the trade mark accumulated capital in the same way as does the owner of a factory or of a patent on a new machine. One might argue that it is unfair to prevent appropriation of physical capital, or research and development capital but allow appropriation of the goodwill embodied in trade marks.

In evaluating the fairness argument, it is relevant, although not necessarily conclusive, to point out that owners of unregistered trade marks have recourse to common-law protection against infringement of their marks. As noted in Chapter I, successful trade mark infringement actions under common law must prove, among other things, the existence of goodwill attached to the mark. Since a substantial number of trade mark infringement cases involve well-known marks, demonstration of goodwill attached to the marks would present no particular difficulty.[26] However, the fairness issue would then devolve to a second level: that is, Is it fair to allow even short-run appropriation of the goodwill attached to specific trade marks?

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25. A more advanced treatment of the fairness issue is offered in W.J. Baumol, "Applied Fairness Theory and Rationing Policy," American Economic Review 72 (September 1982): 639-51.

26. Many extensions of these basic trade marks into other product categories would also likely benefit from common-law protection.

Where a significant component of the ex post returns earned by owners of famous trade marks represents rent, or returns above the ex ante rate of return required to encourage their continued investment in the products involved, the relevance of the fairness argument is attenuated. Where only a competitive rate of return is expected on investments in marketing a new product, as might be expected in the case of many private-label products, the fairness argument is more persuasive. Whether the argument is sufficiently compelling to justify stronger public efforts to identify and punish trade mark infringers is not readily amenable to economic analysis.

Summary

Three welfare criteria for evaluating public policy initiatives were identified and discussed in this chapter: allocative efficiency, fairness and equity in the distribution of income. A framework for evaluating whether increased protection under the Trade Marks Act would improve allocative efficiency was presented and some key theoretical and empirical considerations were introduced. More specifically, two primary potential sources of efficiency change were identified: reductions in consumer search and information costs, and increases in production efficiency. The welfare implications of trade mark protection are also related to the amount and the nature of product differentiation it encourages. The various potential sources of welfare gains or losses are, to a greater or lesser extent, theoretically and empirically interrelated.[27]

Arguments for trade mark protection based on notions of fairness or an improved distribution of income do not appear very persuasive or as fruitful lines of inquiry. In particular, the distributional implications of trade mark protection would appear to be strongly conditioned by the competitive consequences of trade marking. Hence, it is concluded that justification for specific forms of trade mark protection rests primarily on anticipated increases in economic surplus.

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27. These considerations will be elaborated on in Chapters III and IV.

Chapter III

SEARCH COSTS, PRODUCT DIFFERENTIATION AND TRADE MARKS

Effects on the Consumer: Trade Marks, Market Organization and Search Costs

An important focus for the evaluation of the impacts of trade mark protection is the recognition that the use of trade marks is one alternative way of communicating information about the attributes of products to consumers. It is possible that, with weaker protection of the trade mark property right, other means of communication might be employed. In a similar vein, the associated advertising tied to a well-known trade mark is one of a number of potentially important channels of information for consumers about the availability and quality of products.[1] In other words, trade mark legislation is one institutional structure for circumscribing property rights in specific assets. Whether it is a socially efficient form depends, in part, upon alternative institutions that are available to define and preserve such rights.

To elaborate, producers could employ certain voluntary market arrangements to enhance their property rights in trade marks. For example, producers could reduce the potential for counterfeiting by arranging to deal exclusively with certain large retailers. They could in effect induce national retailers to help them preserve property rights in specific trade marks by encouraging the retailers to buy directly and exclusively from the manufacturers and by making known this exclusivity in their advertising.[2] Alternatively, or in addition, national retailers might promote products exclusively for certain manufacturers under the retailers' private brand, as is the case, to some extent, under the current trade mark system. In effect, the integrity of any signalling role played by trade marks would be preserved by the

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1. The importance of evaluating intellectual property legislation in the context of alternative arrangements for preventing the attenuation of intellectual property rights is developed in S.N. Cheung, "Property Rights in Trade Secrets," Economic Inquiry 20 (January 1982): 40-53.

2. A variety of incentives might be used. For example, the manufacturer could allow the retailer to earn a higher gross margin on sales by lowering the manufacturer's price. Alternatively, reduced competition at the retail level associated with exclusive dealing could allow the retailer to earn high margins. Given some degree of bilateral oligopoly, the presumed result would be some shifting of rent from manufacturers to mass retailers. This is essentially the conclusion in Michael Porter, Interbrand Choice, Strategy and Bilateral Market Power (Cambridge: Harvard University Press, 1976), p. 127.

linking of products sales directly to the trade reputation of retailers.[3] As a structural phenomenon, the impact would be to shift, on the margin, the locus of competition from product differentiation at the manufacturers' level to product and service differentiation at the retailers' level. As well, the importance of private-label house brands might increase relative to manufacturers' brands.[4]

Transferring the locus of trade mark protection from the manufacturing to the retailing level inevitably involves a trade-off between the extensiveness of the distribution network and the reliability of the trade mark. This is because the greater the number of retailers involved, the greater the possibility that any one retailer might break an agreement not to carry goods carrying counterfeit marks. Greater reliance on retailers to preserve the integrity of marks increases the market power of retailers relative to manufacturers, and might also promote increased concentration in the retailing sector. Both factors might contribute to higher prices of goods employed in the household transformation function, that is, $\{X_j\}$, identified in Chapter II. It is also possible that consumer costs, including transportation costs, might, in some cases, increase as a result of a smaller distribution network.

The importance of legislative protection of manufacturers' trade marks might also be less manifest where branded goods are dispensed or recommended by expert middlemen, as are pharmaceutical products. Where such expert intermediaries are involved, it could be difficult for infringers to pass off fakes as originals. Furthermore, where the intermediaries are rewarded largely on the basis of their performance as dispensers of product knowledge, they have an incentive to deal fairly with their clientele, since dispensing shoddy products will ultimately cost them customers. Of course, in many cases even expert buyers may need to incur substantial information costs associated with separating infringements from originals in the absence of reliable trade marks. Furthermore, consumers may find it difficult to evaluate the expertness of the intermediaries in the absence of reliable signals that the latter can generate.

Clearly, if trade marks significantly improve allocative efficiency and if the costs of administering the Trade Marks Act are relatively low, there is a strong prima facie argument for maintaining and

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3. In an extreme form of this approach, the manufacturer might integrate into the retailing stage to promote exclusivity associated with the merchandising of his or her marks.

4. Of course, counterfeiting of private-label house brands and even misappropriation of retailer trade names would still be a possibility. The point is that consumers will ordinarily have an easier verification job if the number of authorized points of sale are restricted and made well known.

possibly enhancing the scope of trade mark protection under the Act. On the other hand, if legislative provisions under the Act lead to certain inefficiencies, and if other relatively low-cost (and more benign) institutions are available to serve the social role provided by trade marks, some weakening of the legal property right protection inherent in the registration feature of the Act might be appropriate. The primary concern, therefore, is the efficiency properties of trade marks. A secondary concern is whether specific legislative features of the Act support or detract from the general efficiency argument.

The treatment of the impact of trade marks on consumers -- to this point based on the informational role of trade marks -- can be reformulated in terms of the product-type structure of the markets. For this purpose, goods or services are categorized according to the amount of information that an expert buyer would need to gather before being able to judge accurately their quality. In some cases, only extensive experience in use can convey enough information. It can be said that such goods or services have experience qualities. For such goods or services, even expert buyers need some reliable form of source identification to be able readily to distinguish counterfeits (or low quality) from originals (or high quality). In other cases, even extensive experience in use may not suffice; such goods or services have credence qualities.[5] Credence qualities are present in cases such as automobile repair, where it is difficult to determine after the fact whether repair was necessary. In these cases, the intermediary is tempted to try passing off counterfeits because customers may not be able to tell that they were sold counterfeit goods or services.[6] Equivalently, it can be said that in these cases the measurement costs to consumers of establishing the validity of claims regarding the attributes of products or services are quite high. In such cases, allocative efficiency would presumably be improved if a reliable and relatively low-cost institution for validating product claims was available which did not require consumer expertise in the measurement function.

It has been suggested that trade marks are one such institution. Specifically, the goodwill invested in the trade mark serves as an incentive for the trade mark owner and licensees (if any) to maintain

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5. The use of the term "credence" follows a distinction made in Michael Darby and Edi Karni, "Free Competition and the Optimal Amount of Fraud," Journal of Law and Economics 16 (April 1973): 67-89.

6. An illustration of the potential for this type of behaviour is provided in the case of doctors prescribing placebos for their patients. Where patients are unsure of their ailment, and how a cure relates to the prescribed treatment, it is difficult for them to evaluate the quality of the medicine prescribed. However, where consumers are aware that a specific drug has relieved their symptoms in other cases, they may insist that their physician prescribe that drug.

uniform quality in the good or service bearing the trade mark, since unexpected quality variation would, when discovered, depreciate the value of the mark. Furthermore, consumers will expect goods bearing well-known trade marks to be of fairly uniform quality, since they can rationally anticipate that trade mark owners will want to preserve the market value of their trade marks.[7] Thus the reputation attached to a trade mark decreases the perceived need for consumers to measure the attributes of goods possessing experience and credence qualities. This is not to say that owners of trade marks never have incentives to cheat consumers by selling goods whose actual attributes differ from the advertised attributes. It is to say that the greater the goodwill (or future net revenue) attached to a seller's reputation, the more the seller has to lose by being exposed as a dishonest dealer. Thus the trademark institution can be seen as increasing the probability that the actual attributes of a good or service will match the seller's claims.

Where the consumers are actually producers in a vertically linked production process, backward vertical integration can reduce the risk that suppliers will act opportunistically by selling the downstream firm inferior goods. Of course, the costs of vertical integration may be quite high in other respects and, in some cases, may well not be feasible or even legal (e.g., doctors integrating into the production of pharmaceutical products).

Product warranties on consumer durables are another potential signal of a seller's intention to provide a consistent, minimum level of quality. Such warranties are both a characteristic of the product (since they have some value in themselves) and a quality signal (since they ostensibly convey information about the degree of faith that the producer has in the reliability of the product). Of course, the seller has to be able to distinguish when the good has failed due to improper use by the consumer in order to be able to make the warranty unconditionally available to all purchasers. Also, the consumer's faith that the warranty will be honoured may itself be related to the existence of a well-known trade mark attached to the durable good.[8] In cases of money-back guarantees on nondurables, the product's trade mark may again be relevant to the believability of the guarantee.

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7. In many cases, the commercial value of a trade mark is related to the predictability of quality and not necessarily to the level of quality. Fast-food chains are a good illustration of this point. The notion that higher-than-usual quality as well as lower-than-usual quality can cause trouble for trade mark owners is raised in Yoram Barzel, "Measurement Cost and the Organization of Markets," Journal of Law and Economics 25 (April 1982): 27-49.

8. In cases where the retailer's trade mark is a more reliable signal than the manufacturer's, the warranty function would likely be shifted to the retailer.

Another institution which could reduce the perceived requirements of consumers to measure product attributes is government legislation requiring full specification of ingredients or components of products.[9] However, as product complexity increases, it becomes less likely that the average consumer could effectively use the information conveyed by product specifications. Indeed, even sophisticated industrial users might be reluctant to rely completely on product specifications when buying complex equipment. In the telecommunications industry, for example, even nationalized telephone companies ordinarily buy complex equipment from established producers.[10]

In summary, a variety of alternative institutions exist which could (and, in some cases, do) substitute for trade marks in signalling quality consistency to consumers. In all cases, these substitutes have certain shortcomings or impracticalities. In some cases, such as the use of marketing restrictions or vertical integration, there could be significant impacts upon the degree of competition in markets for the relevant goods and services. Such impacts, in turn, could affect the costs of the goods and services employed in the consumer's transformation function. For example, reduced competition, by leading to higher prices of goods and services, would reduce the quantity vector $\{X_i\}$ the consumer was capable of buying at any income level, thereby reducing $\{Z_i\}$. To be sure, critics have argued that advertising tied to trade marks can also reduce competition.[11]

Trade marks and consumer search: an extension. The net impact of increased or decreased trade mark protection could be significant if the information conveyed by trade marks (and associated advertising expenditures) is an important input to the consumer's choice process; that is, where the effect of trade marks on I is large. In the preceding section, the notion was raised that trade marks function as a device to

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9. The ability of the federal government to set nationwide standards as they relate to foods and drugs has been called into question by the Supreme Court of Canada's decision in the "Lite Beer" case. Specifically, the Supreme Court ruled that certain sections of the Food and Drug Act dealing with standards are either invalid or are ultra vires Parliament insofar as they relate to malt liquors. See Labatt Brewers of Canada Ltd. v. Attorney General of Canada, [1980] S.C.R. 914. In a related case with implications for setting nationwide product standards, the Supreme Court ruled that the application of the Canada Agricultural Standards Act to a transaction wholly within Ontario was ultra vires. See Dominion Stores Ltd. v. Her Majesty the Queen, [1980] S.C.R. 844.

10. See Steven Globerman, "Markets, Hierarchies and Innovation," Journal of Economic Issues 14 (December 1980): 984-85.

11. The overall competitive implications of reduced (or increased) levels of trade mark protection will be fully discussed in Chapter IV.

signal the consistency of quality, which reduces the need for consumers to examine difficult-to-identify attributes both pre- and post-purchase. In the terminology of our model, the use of alternative signalling devices (such as marketing restrictions, warranties, expert middlemen and so forth) may not provide the same quantity of I per unit of cost, thereby reducing consumer welfare. The basic notion here is that trade marks are signals of quality that also give the consumer a means of retaliation if the quality does not meet expectations.[12] A firm making a large investment in establishing a reputation for a mark has an incentive to preserve the goodwill of the mark through honest and reliable dealing in future periods. Having established a large effect on I, the firm would be less likely to reduce its value.

A number of marketing experts have argued that advertising tied to a brand name is also effective in lowering search costs for consumers by facilitating recognition, processing and recall of information.[13] Preferred brand names could be recognized more quickly than nonpreferred brand names, since words that connote important values often are perceived more readily.[14] A brand name can also summarize a good deal of more detailed information for a consumer familiar with that brand. In effect, the name and all it stands for can be thought of as a chunk of information. The actual amount of underlying material that can be processed simultaneously can be expanded by the formation of larger chunks (e.g., by associating several attributes with a brand name so that the mere mention of the name elicits a gestalt).[15] In tasks for which recall is the focus, subjects given instructions to recall as much as possible have been shown to use memory strategies which concentrate on

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12. This point is made in Barzel, "Measurement Cost," p. 36, and George Akerlof, "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," Quarterly Journal of Economics 84 (August 1970): 499-500.

13. Note that we are using the term "brand" to denote an identified product in a set of similar products. In some cases, the brand will be identified by a trade mark and in some cases by a house mark. Our use of the term "brand" incorporates the potential for the use of either. While therefore somewhat imprecise, it is a convenient artifice and also accords with the general approach in the marketing and economics literature.

14. See, for example, J.F. Engel, R.D. Blackwell and D.T. Kallat, Consumer Behavior, 3d ed. (Hinsdale, Ill.: Dryden Press, 1978), pp. 418-19.

15. This argument is made in James Bettman, "Memory Factors in Consumer Choice: A Review," in R.J. Lutz, ed., Contemporary Perspectives in Consumer Research (Boston: Kent Publishing Co., 1981), pp. 147-48.

organizing, associating and grouping the items to be learned. If groupings are already present in the materials to be learned (e.g., a trade mark), then this can greatly facilitate recall.[16]

The empirical evidence on the relationship between advertising tied to brand names and consumer search and information costs is generally crude and inconclusive. Newman suggests that while the hypothesis that consumers search less when they know the product and have clear decision criteria is intuitively attractive, direct evidence is almost nonexistent because direct measurement of knowledge and clarity of criteria has received almost no research attention.[17]

For purposes of considering this argument further, it is again useful to consider the product-type characteristics of the markets. To the above-mentioned notion of experience and credence qualities we can add search qualities, which can be known before purchase through search behaviour. Goods which can be bought only as large purchases and which possess important search qualities are labelled search goods because they are goods for which consumer search activity is expected. Opposed to search goods are convenience goods. These are goods which tend to form a relatively small part of consumer budgets (at least at the time of each purchase) and for which experience or credence qualities are important.

Given these product types, we can hypothesize about the nature of the trade mark use and product-branding activity we might expect to see associated with each. Search goods should be associated with information activities emphasizing the objective features of the product (e.g., price, size, complexity and so forth), since the producers should be interested in reducing the consumer's search costs.[18] On the other hand, convenience goods should be associated with quality signalling (i.e., activities emphasizing the subjective characteristics of the product such as taste, texture and so forth), in order to induce the consumer to try the good and establish an experience history with it.[19]

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16. Ibid., pp. 139-40.

17 See J.W. Newman, "Consumer External Search: Amount and Determinants," in A.G. Woodside, J.N. Sheth and P.D. Bennett, eds., Consumer and Industrial Buying Behavior (Amsterdam: North-Holland Publishing Co., 1977), pp. 164.

18. These information activities will often be undertaken to some degree by specialized distributors and retailers.

19. The distinction between search and experience goods is found in Phillip Nelson, "Advertising as Information," Journal of Political Economy 82 (July-August 1974): 729-54.

The preceding discussion suggests two empirical questions: (1) Is the use of trade marks and associated advertising a particularly effective way to reduce consumer search costs? and (2) Is the signalling role of trade marks more important in the case of convenience goods or search goods?

Unfortunately, the available evidence bearing on these two questions is far from definitive. For example, Farris and Albion cite the finding of a weak positive relationship between advertising and product quality, where quality rankings are taken from reports by consumer research groups.[20] This suggests that advertising tied to specific brands does provide a measure of unbiased information about product attributes. Spence and Engel found that brand reputation is an important criterion in the choice of a variety of goods and services, including toothpaste, dress shirts, suits and over-the-counter drugs.[21] The ambiguity of this result is pointed up by Woodruff's finding from simulated consumer choice experiments that search declined as subjects learned to buy by brands over a series of trials, even when the brands were identical except for simple identifications. Furthermore, repeated buying of brands did not reduce search costs below average if the buyer initially considered more than one brand.[22] Thus it would appear that brand recall reduces information costs for both search and convenience goods, although the magnitude and economic significance of the relationship is uncertain. The finding that advertising to sales ratios are higher for products which are inherently low in average purchase amount (i.e., are more likely to be experience or credence goods)[23] suggests that reduced protection for trade marks might impose additional information costs, especially for convenience goods.

In summary, while other means of signalling product quality are available to producers, they are probably not as efficient as trade marks. In this regard, trade marks presumably reduce consumer search

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20. See Paul W. Farris and Mark S. Albion, An Investigation into the Impact of Advertising on the Price of Consumer Products (Cambridge, Mass.: Marketing Science Institute, 1979), p. 68. It should be recalled, however, that trade marks may signal consistency of quality more than ranking of quality.

21. See Homer Spence and James Engel, "The Impact of Brand Preference on the Perception of Brand Names: A Laboratory Analysis," in P.R. McDonald, ed., Marketing Involvement in Society and the Economy (Chicago: American Marketing Association, 1970), pp. 64-65.

22. See R.B. Woodruff, "Measurement of Consumers' Prior Brand Information," Journal of Marketing Research 9 (August 1972): 258-63.

23. For evidence on this point, see Nelson, "Advertising as Information," p. 742.

costs (broadly defined to include the costs of information collection and the measurement of attributes). In the terminology of the model introduced in of Chapter II, trade marks increase the value of I, other inputs constant, and therefore increase consumer surplus. Though this effect is difficult to prove, the available empirical evidence on consumer search behaviour tends to support it.

Theoretical considerations suggest that the reduction in search costs will be greater for goods that have important experience or credence qualities, called here convenience goods. That is to be expected because, whatever the signals from sellers, consumers will undertake extensive search and measurement before purchasing search goods, especially those which command a large fraction of their budgets. Again, while the empirical evidence is far from conclusive, it does tend to support the expectation.

Trade Marks and Product Differentiation

Stronger enforcement of trade mark rights can be seen as enhancing protection against the appropriation of the goodwill inhering in a trade mark. But the behavioural implications of that protection for product differentiation and trade mark use are not as obvious as they may appear. In particular, it is unclear to what extent enhanced protection encourages greater product differentiation, and to what extent it encourages the use of trade marks as a primary quality signal rather than alternative techniques such as restrictive marketing or the use of specialized agents. The relationship between trade mark protection and product differentiation in Canada is complicated by the fact that many of the trade-marked goods sold in Canada are produced by multinational firms, whose brand identification and trade marks benefit from spillovers of foreign (especially U.S.) advertising and other brand identification activity. The ex ante returns to introducing new products into the Canadian market may, therefore, be favourable even in the presence of counterfeiting.

The conventional wisdom of marketing executives is that trade mark protection promotes product branding and, in turn, product differentiation. Critics of advertising essentially concur with this view but argue that, in most cases, new brands are essentially similar to existing goods. Marketing executives, on the other hand, believe that the new brands must promote consumer welfare by satisfying consumer tastes or they will not penetrate the market. These two views of product branding have often been related to an argument about the informative versus the persuasive content of advertising. This distinction is empirically not very fruitful, since there seems to be no objective way to measure the persuasive content of advertising. Furthermore, the distinction is bound to be one of degree.

The fundamental issue in product differentiation is the degree of substitutability between new and existing products, where the products are described in terms of characteristics. It is highly unlikely that two consumer products are identical in all characteristics, physical as well as aesthetic.[24] Equivalently, all advertising presumably has at least some purely informational component. Therefore, the issue can be more readily addressed within the context of the optimal degree of product differentiation.[25]

The rationale for presuming that a positive relationship exists between the strength of trade mark protection and the extent of product differentiation was discussed briefly in Chapter II. Presumably, the decision to introduce a new brand will depend on the resulting expected net revenues, discounted and adjusted for any indirect impacts the new brand might have on sales of the firm's other products. The firm would presumably introduce the new brand if its expected net present value was positive.

The opportunity to register a trade mark for the new product, coupled with the strong enforcement provisions of the Act against infringers, would clearly lower the costs to producers of protecting against the appropriation of the product's developing goodwill. All other things constant, this would increase the ex ante net present value of a new product. The size of the increase would vary from product to product, depending on such factors as the nature of the good in question (e.g., search versus convenience goods), the availability of other means to prevent duplication (e.g., patents, design protection, specialized knowledge), the availability of other quality signalling techniques and so forth. The positive impact of trade mark protection on the anticipated net revenues from any one product might, in turn, be reinforced by brand-name complementarities across products. A number of observers

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24. The distinction between physical and aesthetic characteristics as it pertains to an evaluation of the Industrial Design Act is discussed in Steven Globerman and Mitchell P. Rothman, "An Analysis of Canada's Industrial Design Act," mimeographed (Report submitted to Consumer and Corporate Affairs Canada, 1981). Some evidence that product characteristics differ, to some extent, across products is provided by a study of new product introductions in the United Kingdom. Seventy per cent of those test marketed were never introduced nationally and thus could be classified as failures. The most common reason was that the product was nothing more than an indistinctive "me too" which offered no significant price or performance advantage to the consumer. See T.T. Semon, "On the Perception of Appliance Attributes," Journal of Marketing Research (February 1969), pp. 91-94.

25. This paradigm is described in Globerman and Rothman, "Industrial Design Act."

have argued that the potential for brand franchise extension substantially enhances the returns from the introduction of a successful new brand.[26]

The value of introducing a new brand would also be increased if the chances of franchising or licensing were improved. As noted in Chapter I, trade mark registration significantly reduces the risk that licensing the use of a trade mark will damage or destroy the distinctiveness of the mark. In cases where franchising or licensing is the most profitable way to exploit fully the market potential of a new product, trade mark protection would therefore provide an additional incentive, on the margin, for its introduction.

Two other considerations alluded to in Chapter II should be developed here. One is that strong legal protection of trade marks might encourage brand experimentation on the part of established firms. If established firms did not have to rely wholly on the goodwill attached to the house mark to protect geographical or other types of marketing extensions, they could experiment with new products dissociated from the company's house mark or other identifying trade marks with less risk that an unsuccessful new product will "contaminate" the firm's existing product lines. Moreoever, the goodwill built up in the new brand can be more readily capitalized through sale to another firm. This is because a product identified primarily by a separate mark should be more easily separated from a company's product line than one which is identified by the company's house mark. In effect, trade mark protection contributes to making a company's product portfolio more liquid.[27]

A second consideration relates to the possibility that the enhanced legal protection of trade marks promotes not just additional product differentiation, but also the systematic upgrading of product quality.[28] In Klein and Leffler's model,[29] what assures high-quality

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26. An example of brand franchise extension is provided by the complementarity between Sunkist Oranges and Sunkist Orange Soda. For a discussion of brand-name complementarities, see E.M. Tauber, "Brand Franchise Extension: New Product Benefits from Existing Brand Names," Business Horizons 24 (March-April 1981): 36-41.

27. It also reduces the implicit quality-consistency signal inhering in the new product's mark, since the seller's reputation on a variety of other products is not as evidently on the line.

28. Again, the distinction here is between level and consistency of quality.

29. See Benjamin Klein and Keith Leffler, "The Role of Market Forces in Assuring Contractual Performance," Journal of Political Economy 89 (August 1981): 615-41.

supply is the capital loss due to the loss of future business if low quality is produced. Since the imputed value of the firm's trade mark is determined by the firm's expected quasi rents on future sales, this capital loss from supplying quality lower than promised is represented by the depreciation of the asset represented by the trade mark. The expenditures dedicated to promoting the awareness of trade marks are therefore similar to the collateral that the firm loses if it supplies output of less than anticipated quality. Were property rights in trade marks easily alienated, trade marks per se would not be an especially robust institution to discourage cheating on quality. While other implicit forms of collateral might be available (e.g., the use of nonsalvageable productive assets), they could well be more expensive or less effective in this role than trade marks.

In summary, trade mark protection contributes to a higher anticipated net return associated with introducing new products and, perhaps especially, higher-quality products. This effect would be reinforced if brand names reduced search costs and increased the effectiveness of advertising by providing a focal point for consumer recognition and recall. Both of these considerations would promote the introduction of new products, all other things constant. On the other hand, if existing brands have strongly entrenched market positions (perhaps, in part, owing to trade mark protection), the incentives for potential competitors to introduce new brands may be reduced by the low probability of successful penetration of the brand-leaders market.[30] As noted earlier, the opinion of marketers is that trade mark protection promotes the introduction of new products. The balance of theoretical considerations would appear to favour this positions.

Two types of innovation. Two kinds of innovation have been identified in the economic literature: vertical and horizontal.[31] Vertical innovations are resource saving: that is, they allow the performance of some task, or satisfy some consumer want, at lower resource cost than was possible previously. As already noted, while it is not possible to label vertical innovations as unambiguously good, it is most likely that they promote economic welfare given normal consumer tastes.

It is less certain that horizontal innovations promote economic welfare. Horizontal innovations result in greater product diversity, not in lower costs of producing any good. The more horizontal innovation, the more fragmented and specialized the market becomes. This kind

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30. The relevant notion here is the concept of brand loyalty. Some economists argue that brand loyalty is an ephemeral concept. That is, a consumer's loyalty is to a superior product's attributes and not to its brand name. The relationship between trade marks and entry conditions will be considered in Chapter IV.

31. See Kelvin Lancaster, Variety, Equity and Efficiency (New York: Columbia University Press, 1979), pp. 12-15.

of product proliferation is sometimes attacked as excessive. However, as the analysis in Chapter II indicated, there is no sound analytical basis for rejecting horizontal product innovations per se; in fact, they always increase consumer welfare by giving some consumers new products they like.

New products embodying purely visual changes have been deprecated by some critics as being wasteful. However, it must be emphasized that purely visual or aesthetic innovations may be vertical innovations. This could occur it, for example, the new design is cheaper to produce than the old, or if the new design is preferred by all consumers on aesthetic grounds. This latter possibility is remote because consumers probably have very different tastes. For example, a newly designed kitchen appliance might have no greater production costs than previous appliances of a similar nature, might perform in exactly the same manner and be aesthetically more pleasing to almost all consumers. The new design could be considered a vertical innovation because it conserves resources, but its welfare effects are not unambiguously positive. Because the aesthetic and visual qualities of the old appliance may have more appeal for some consumers, its replacement by the new one could reduce their welfare.[32]

The distinction between changes affecting physical function (i.e., operational changes) and changes affecting aesthetics (i.e., visual changes) is a useful one in evaluating the Trade Marks Act. While the identification in either direction cannot be complete, it seems likely that the bias of trade mark protection is to encourage visual innovations. This is because changes in physical function can be potentially protected under the Patent Act. While patent protection does not necessarily prevent conscious infringement, it does serve as another avenue of recourse against intentional or unintentional infringement of rights. Moreover, it is more likely, on balance, that purely (or primarily) operational changes are characteristic of innovations in producer goods rather than consumer goods. This is because profit-maximizing producers are more likely to emphasize the adoption of innovations which promise to increase productivity. Producers are also presumed to be more efficient in evaluating the qualitative attributes of products. Finally, producers will ordinarily have more avenues open to guarantee product quality, including vertically integrating.

It should not be concluded that trade mark protection offers no encouragement to the introduction of vertical innovations. The protection afforded by the Act could facilitate more effective ways of promoting and marketing a new good. For example, the Department of Commu-

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32. Welfare would not be reduced if the new design were sufficiently cheaper to produce that the consumer would buy enough more of it to compensate for loss of visual pleasure.

nications has expressed the belief that obtaining a trade mark for the Telidon product would have allowed the government, through licensing arrangements, to glean most of the financial goodwill benefits from the publicity and advertising surrounding Telidon. In fact, the Department failed to get a trade mark for the name in the United States both because there was at least one company with a similar-sounding name and because the term "Telidon" had entered the public domain.[33] As a consequence, it applied for a certification mark instead. The certification mark would allow other companies to use the name Telidon, with the Department's approval. However, as things stand, a foreign company could copy Telidon and mass-produce it under a similar-sounding name (for example, Teledome), and the only advantage true Telidon licensees would have would be whatever new advances they developed on their own.

While the potential contribution of strong trade mark protection to the profitability of introducing new producers' goods cannot be dismissed, it seems likely that its significance is more pronounced in the case of consumer goods. Anecdotal evidence for this assertion would be provided by a finding that vertical marketing restrictions, such as exclusive dealing, are of greater relative importance in the case of producers' goods.

Horizontal Product Differentiation and Economic Welfare

While there is a basis for arguing that trade mark protection is not an irrelevant factor affecting incentives to introduce vertical innovations, it probably has a greater influence on decisions to introduce horizontal innovations. There is no presumption that additional horizontal product differentiation necessarily promotes economic welfare. Indeed, it is possible for horizontal product differentation to become excessive beyond some point.[34]

Horizontal product innovations can range from a mere change in colour to much more sophisticated changes in product characteristics. Even in a one-dimensional analysis, products can have more or less of the characteristics given by the single dimension. For example, the model which follows was originally developed to analyze the market for breakfast cereals based on one single dimension of cereal, that of the proportion of sugar.[35] Other such horizontal variations could include

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33. See Jonathan Chevreau, "Imitators Seen as Threat to Telidon," Globe and Mail, June 4, 1981, p. B.5.

34. The discussion presented here follows quite closely the analysis in Globerman and Rothman, "Industrial Design Act."

35. See F.M. Scherer, "The Welfare Economics of Product Variety: An Application to the Ready-to-Eat Cereal Industry," Journal of Industrial Economics 28 (December 1979): 113-34.

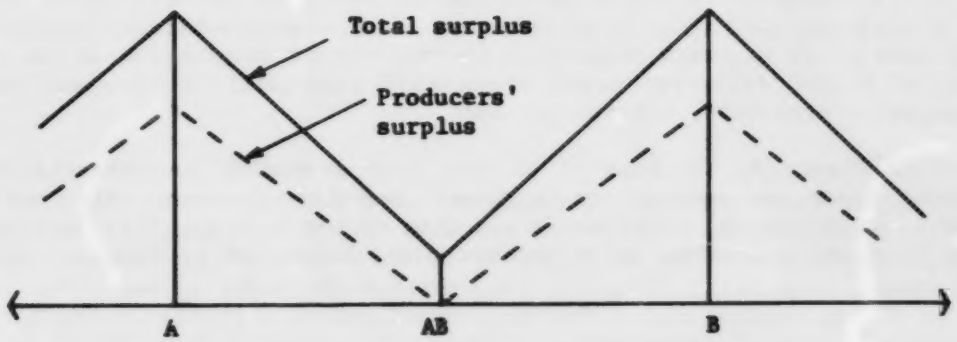
the introduction of new brands of cigarettes, especially those with somewhat lower tar and nicotine content than existing brands; and the creation of new brands of soaps and laundry detergents, each with slightly different combinations of such characteristics as washing power, suds level and operating water temperature. All of these new products basically combine available inputs in slightly new ways, presenting the consumer with a new choice without extending the amount of characteristics which he or she could consume for the same income.

As noted in Chapter II, the increased choice has some functional value for at least some consumers, under the assumptions about the nature of the consumers' preference functions. The problem is to determine whether the consumers' surplus generated by the introduction of a new product is outweighed by the cost of developing that product, and therefore whether the new product creates a net welfare loss. The analysis concludes that, under many circumstances, firms in moderately concentrated consumer product markets are more likely to introduce horizontal innovations, and that these innovations are less likely to produce increases in net welfare than are innovations introduced by firms in highly concentrated industries or in producers' goods markets.

The analytical model. A relatively simple model[36] which allows analysis of the net welfare effects of a horizontal product innovation is outlined in Figure 3. The model analyzes the case where the product has

Figure 3

Economic Surplus with Two Products



36. Ibid.

only one characteristic, but that characteristic can vary in degree or intensity. Then different products are distinguished entirely by the intensity of the provision of the single product dimension. The horizontal axis in Figure 3 represents a one-dimensional space over which a product's perceived characteristic intensity might vary. Consumers' preferences for a given characteristic are described by their location in the space. For example, if the horizontal axis represents the characteristic strength, then a consumer who prefers a stronger product would be located closer to point B than to point A.[37]

The vertical axis of Figure 3 measures, for any point on the horizontal axis, the area under the inverse demand function for all consumers whose preferences match that point, given the price of the product in question and also the prices of all substitute and complementary products. The upper, solid line shows the total surplus, both producers' and consumers', for any given point; the lower, broken line shows producers' surplus alone. Consumers' surplus is, of course, the distance between the two lines. These lines form a series of tent-like shapes, with their peaks at the point in the space which represents the actual characteristic intensity of some product.

In this particular example, Figure 3 assumes that only two products, A and B, are actually supplied, at least initially. These products have characteristic intensities such that they will exactly match the tastes of those consumers who are actually located at points A and B along the characteristic scale. Those whose preferences are not exactly satisfied by either A and B (who, in general, will be most consumers) must buy one or the other (or some mix of them if that is feasible), or perhaps some quite different product. (Under the assumptions of the last chapter, consumers who are located near A will choose A in preference to either some other product or B.) In any case, consumers whose ideal product is represented by neither A nor B will suffer a loss in utility by having to consume an imperfect substitute. (This loss in utility is analogous in a geographic spatial model to the transportation cost a consumer incurs in securing output from a geographically distant plant under free on board pricing.) Given downward sloping demand functions, a higher delivered price means that less will be consumed by more-distant consumers, ceteris paribus.

In Figure 3, the loss of utility from consuming less-than-ideal products leads analogously to a lower quantity demanded, the more distant the consumers' preferences are from either A or B. This factor, along with the assumption of a uniform distribution of preference over

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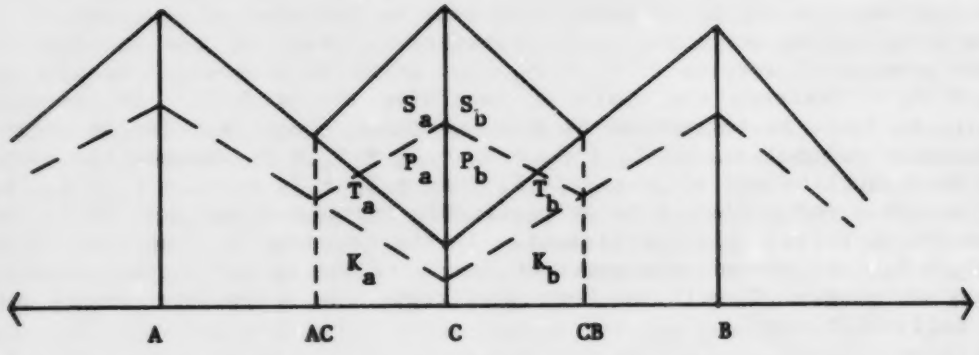
37. As in Chapter II, it is assumed that preferences are densely distributed over the space. For convenience, it is further assumed here that the distribution is uniform. This further assumption makes the figures easier to draw but does not alter the conclusion.

the horizontal axis, gives rise to the tent shape of the surplus functions, whose maxima are at the points in space where product characteristic intensity exactly matches preference.

New products. The introduction of a third product, C, lying between products A and B in terms of the relevant characteristic is analyzed using Figure 4. The introduction of this third product allows consumer preferences in the neighbourhood of C to be satisfied better, leading to an increase in consumption by those consumers and therefore to increases in consumers' and producers' surplus, represented by the new tent-shaped functions with maxima above point C. (As in other spatial models, purchases are assumed to be divided among products at boundaries, i.e., AC and CB, where the total surplus functions intersect.)

Figure 4

Economic Surplus with a New Product



Consider, first of all, the implications of a monopolist contemplating the introduction of product C. If this single producer, currently selling products A and B, contemplates the introduction of product C, and if other producers cannot enter at C for some reason, the relevant surplus to the producer of A and B from introducing C is the sum of the areas T_a, T_b, P_a, and P_b. The areas T_a and T_b represent transfers from consumers' into producers' surplus, while the areas represented by P_a and P_b are true increases in producers' surplus. (Note that the areas K_a and K_b represent transfers of producers' surplus earned on products A and B to surplus earned from C. Hence, the monopolist will not consider areas K_a and K_b to be a net increase in surplus from introducing product C.)

Second, consider a market structure with monopolistic competition (i.e., many sellers of slightly differentiated products), where entry into the industry by one new firm is possible at any point along the characteristic scale. In terms of a monopolistic competing firm contemplating offering product C in competition with the other firms producing products A and B, if it assumes that the prices of A and B will remain unchanged after product C is introduced, it will perceive itself as gaining areas T_a, T_b, P_a, and P_b, plus K_a and K_b. That is, the transfer of surplus from the sellers of products A and B will represent a net increase in surplus for the monopolistic competitor. Thus a monopolistic competitor will ordinarily have a larger gain in surplus through new product introduction than would the monopolist. The monopolistic competitor will choose to introduce product C as long as the increase in his or her surplus (i.e., the sum of the areas K_a, K_b, T_a, T_b, P_a, and P_b) exceeds the costs of launching product C. The monopolist, on the other hand, will compare the sum of the areas T_a, T_b, P_a, and P_b with the cost of launching product C in making the new product introduction decision.[38] Thus if C's launch costs are the same for each, there is more chance of the one competitor entering with C than of the monopolist expanding his or her product line.

An important social welfare issue is whether the variety of products supplied under any market structure is optimal. Assuming that a dollar of consumers' surplus is valued equally with a dollar of producers' surplus, it is socially efficient to introduce a new product if its addition to surplus net of transfers -- that is, the increase in pure producers' surplus of $P_a + P_b$ plus gains in consumers' surplus of $S_a + S_b$ -- exceeds the costs of launching the product. The product will, in fact, be introduced by a monopolistic competitor (or an entry-deterring monopolist) if $K_a + K_b + T_a + T_b + P_a + P_b$ exceeds the costs of launching the new product. If $K_a + K_b + T_a + T_b$ exceeds $S_a + S_b$, it is possible for product C to be profitably introduced but for its introduction to be socially inefficient. If the converse is true, and if $P_a + P_b + S_a + S_b$ exceeds the costs of launching the product, the introduction of product C will be both profitable (in a private sense) and socially efficient.

Figure 4 suggests a number of factors that influence whether decisions motivated by profit maximization under actual or potential monopolistic competition will tend also to advance social welfare. For example, the slopes of the surplus function at different points along the characteristic scale will reflect the degree of substitutability among the various products. If they are relatively good substitutes for

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38. This difference essentially underlies economists' contention that greater product variety will emerge under monopolistic competition than under pure monopoly. Of course, a monopolist might introduce product C to deter entry, in which case no difference in product variety would emerge.

each other, their respective surplus functions will look flatter or smoother.[39] This reflects the fact that when products are relatively good substitutes for one another, demand will fall off less rapidly when consumers have to make do with a product that departs by some given amount from their ideal characteristics. The flatter the various surplus functions, the smaller the diamond-shaped area ($S_aS_bP_aP_b$) relative to $K_a + K_b$. That is, introducing a new product that is a very close substitute for existing products will have a relatively small demand-expanding effect and will primarily result in producers of existing products losing sales (and associated profits) to producers of the new product. In sum, the degree of product differentiation at the optimum will be greater if the products are not very close substitutes and the taste for diversity is greater, ceteris paribus.

Some special cases. Several realistic complications must be recognized. To this point, it has been assumed that the prices of products A and B remain fixed when product C is introduced at the same price. However, if the introduction of product C, and the subsequent loss of market share for producers of goods A and B, touches off a price war, the total surplus function might be shifted upward.[40] The effect here might be likened to a breakup of a cartel in which price falls, output increases and there is a shift of surplus from producers to consumers, but where, on balance, there is a net increase in overall surplus due to the elimination of the deadweight loss from monopoly. Such price decreases are less likely in markets where sellers respect their interdependence in pricing and cooperate in terms of joint profit-maximizing policies.

Another complication is introduced by the presence of economies of scale in production. If goods A and B are characterized by economies of scale, a cutback in output will increase unit costs of production. This, in turn, will lead to a decrease in producer profits and, possibly, a decrease in the surplus for consumers of products A and B. This phenomenon can be modelled as a shift downward in the total surplus function as a result of the introduction of C. The increase in total surplus would then have to be estimated netting out $T_a + T_b + K_a + K_b$ plus any other decreases in producers and consumer surplus. This net increase will clearly be smaller than in the case of constant cost production. Hence, the optimal degree of product differentiation will be lower, the greater the degree of economies of scale.

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39. An analogous consideration is that the taste for diversity on the part of consumers is relatively limited. Diversity involves more decision-making effort and this can be a disutility. This would also contribute to the surplus functions being more flat than peaked.

40. This possibility highlights the potential impact of trade mark protection on competitive conditions, a topic considered in Chapter IV.

The assumption that the product characteristics space is one-dimensional, while unrealistic, poses no limitations to the foregoing conceptual analysis. It does, however, complicate the empirical evaluation of whether given markets are likely to be characterized by too much or too little product differentiation. In particular, it is very difficult to evaluate the welfare implications of new product introduction in markets where product interactions occur over a large number of dimensions and where small numbers of firms compete.

Implications of the model. This model has allowed a clearer explication of several points about the optimal level of product differentation in a market. First, it illustrates the trade-off in the introduction of any new product. Because consumer preferences are evenly distributed in the space, any differentiated new product will increase consumer surplus by coming closer than existing products to the ideal of at least some consumers. In the model of Chapter II, the set of $\{X_j\}$ is expanded, presumably facilitating a more efficient transformation of $\{X_j\}$ into a desired set of $\{Z_i\}$. Against this gain must be set the costs to society of having the extra product. These costs encompass both the development and other start-up costs for the new product (part of which would be promotional costs and costs of protecting trade marks), and the possible increase in production costs for competing products where there are economies of scale in production in the output range where production is currently taking place. These increased costs would be manifested in a smaller number of individual X_j units available for a given level of income. While the relationship is not precise, it might be suggested that excessive product differentiation describes a condition whereby higher costs for individual X_j units more than offset the benefits of an expansion in the $\{X_j\}$ set, thereby leading to lower realized values of the $\{Z_i\}$ set.

There are a number of market characteristics that make excessive product differentiation more or less likely. First, it is clear that the rewards to new product introduction will be greater for both producer and consumer if the consumer's tastes are highly discrete. That is, the more highly the consumer values a product which exactly fills his or her needs, and the less willing he or she is to accept compromises, the greater the consumers' surplus (and therefore total surplus) which will be generated by the introduction of a new product. Empirically, this question can be put in terms of the cross-elasticities of demand between the various products in the market. The higher the cross-elasticities (that is, the more sensitive the demand for product A is to changes in the price of B), the less will be the gain in consumers' surplus when a differentiated new product is introduced. Empirically, then, one might try to determine the degree of cross-elasticity in the product markets where registered trade marks are important. Unfortunately, data relating to cross-elasticities are extremely difficult to obtain.

Second, the analysis indicates that the benefits of product differentiation are inversely related to the extent of economies of scale. Most manufacturing processes have some scale economies, especially when starting at low levels of production. If for no other reason, such economies are created by the learning curve. However, for most products the long-run average cost curve probably flattens out beyond a certain point. This occurs as the result of two kinds of economies of scale: (1) product-level economies, which relate to the production condition of the individual product, and (2) plant-level economies, which relate to the efficient use of the whole plant. For plant-level economies, the long-run average cost curve flattens out once the minimum efficient size (MES) of a plant has been reached. However, even in MES plants, product-level economies of scale can be important. If too many products are made in the same plant, so that no product can reach the flatter portion of the learning curve or otherwise achieve optimal length of production run, then the available product-level economies are not fully exploited, and diseconomies of scale result at the product level.

Where the long-run average cost curve has this shape for plant-level economies -- that is, where there is some identifiable level of output beyond which costs cease to fall -- production generally will take place on the flat portion of the curve. Firms will choose to build plants large enough to be efficient. If the plants are not only efficient but are well beyond MES, then the loss of output from the introduction of one new product may not be large enough to drive any plants below MES. In that case, there is no production cost penalty in the welfare analysis. In general, it is assumed that firms will produce at volumes greater than MES if possible, so that possible production cost increases due to the failure to exploit available economies of scale would not generally be a major policy issue in large markets such as the United States. A similar argument can be made for product-level economies.

However, it is widely recognized in Canada that the domestic market for many goods is too small to support a competitive market consisting of several firms, each producing at minimum cost.[41] In that case, any reduction in output from existing plants would in fact force existing producers back up their cost curves, and might cause an increase in costs in general; however, such production cost increases must be weighted against cost savings at the retail end of the production process. As noted above, a strong argument can be made that branding facilitates mass-merchandising of commodities, particularly convenience goods. Were more specialized retailing services required to market commonly purchased commodities, it is likely that distribution costs of these commodities would increase significantly, because of the additional transactions costs imposed on the system as well as the possible

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41. See, for example, F.M. Scherer et al., The Economics of Multi-Plant Operation (Cambridge: Harvard University Press, 1975), p. 336.

sacrifice of some extant economies of scale in mass-merchandising institutions such as supermarkets.[42]

Therefore, another relevant empirical question is the degree of economies of scale in those industries which rely intensively upon trade marks, and the extent to which companies operate plants of at least MES to provide products at sufficient levels to exploit available economies of scale. A related question is the extent of scale economies in the distribution sector and particularly in those institutions concerned with marketing convenience goods.

At third general topic of empirical investigation is the market structure of the relevant industries. The model indicates that the benefits to consumers from additional product differentiation are likely to be limited in markets characterized by monopolistic competition and relatively easy entry.[43] It is also likely that the competitive consequences of trade mark protection will be benign in these markets, since the potential for entry with reasonable substitutes is presumably quite feasible.[44] On the other hand, industries that are distributed closer on the spectrum towards tight oligopoly or monopoly are less likely to have excessive product differentiation. Of course, it is also in these industries that the competitive concerns apropos trade mark protection are most manifest. To the extent that trade mark protection, on balance, can be considered to promote competition, its overall welfare effects in monopolistic industries might, therefore, be quite positive.[45]

Summary and Conclusions

This chapter has explored the relationship between trade mark protection and two determinants of its overall impact on economic welfare: (1) search and measurement costs, and (2) product differentiation. With respect to (1), it was argued that trade mark protection, on

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42. For some evidence on the existence of economies of scale in supermarkets, see Bruce Mallen, "A Preliminary Paper on the Levels, Causes and Effects of Economic Concentration in the Canadian Retail Industry: A Study of Supermarket Power," Reference paper no. 6 (Ottawa: Food Prices Review Board, 1976), p. 43 and passim.

43. This statement could be qualified to the extent that trade marks facilitate the appearance of significantly higher-quality products in these markets.

44. This is not to deny that specific branded goods can provide a source of temporary or quasi rents even in easy-to-enter industries.

45. This issue will be discussed in more detail in Chapter IV.

balance, probably contributes to nontrivial reductions in search and measurement costs; however, the available evidence does not permit any reliable conclusions on the empirical significance of these reductions.

With respect to (2), it is probable that trade mark protection promotes product differentiation; it is less clear, however, that additional product differentiation promotes economic welfare. In monopolistically competitive industries, especially those related to the production of convenience goods, a trade-off would appear to exist between exploiting economies of scale in distribution as against those in production. Evidence on the magnitudes of these two sources of scale economies in relevant industries where trade mark registration is of some significance would shed some light on the social benefits associated with strengthening or weakening trade mark protection. In industries closer to monopoly, a stronger presumption can be held that product differentiation promotes economic welfare. However, in these markets, the potential anticompetitive consequences of trade mark protection are of greatest a priori concern. A useful investigatory focus for these markets is the relationship between trade mark protection and competition.

Chapter IV

TRADE MARKS AND COMPETITION

Introduction

The consequences of increased competition on domestic economic welfare derive partially from the impact of competition on production efficiency and partially from its impact on the distribution of income between foreign and domestically owned factors of production. The presumption is that if trade mark protection promotes competition, it is likely, on balance, to promote production efficiency and, consequently, economic welfare. On the other hand, if trade mark protection either promotes market power or facilitates the exploitation of market power, it is likely, on balance, to detract from economic welfare.

The literature identifies two dimensions in which trade marks can affect economic performance: the structure of the relevant industries and/or the behaviour of firms in those industries. Since it is generally presumed that behaviour follows structure to a significant degree, separate consideration of each dimension is, to some extent, arbitrary. However, it is a useful pedagogical device to isolate the key conceptual relationships.

Trade Marks and Market Structure

In Chapter III, it was argued that one consequence of weakened protection and enforcement might be a shift of the quality-signalling role away from manufacturers' trade marks, on the margin, to exclusive retailers, whose trade names (or house marks) would promote goodwill in the products affected. It was also noted that this shift would likely be accompanied by increased concentration in the retailing sector, since the population of retailers with well-known trade names and broad geographic representation is a relatively small subset of all retailers.[1]

Vertical restrictions and competition. One can contemplate the accentuated use of a variety of vertical restrictions to facilitate this transfer in signalling responsibility. For example, the supplier of a product bearing a trade mark may restrict the number of distributors legally authorized to supply and service the product. Such a restriction would reduce the manufacturer's costs of policing the distribution

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1. Of course, manufacturers will weigh the net advantages of dealing with independent retailers versus integrating forward into their own distribution facilities.

network against the sale of infringing goods. Vertical distribution restraints on the licensor may, in turn, involve exclusive supply agreements whereby intrabrand competition is limited. Such restraints usually take the form of prohibitions on direct sales by the licensor and on indirect sales to, or appointment of, other dealers in the exclusive licensee's designated territory. Exclusive supply agreements provide a strong incentive for the distributor to promote goodwill in the manufacturer's product, especially if the manufacturer shares with the distributor any monopoly quasi rents associated with a dominant market share position for the product.

Exclusive dealing, another form of vertical marketing restriction, essentially covers any practice whereby a supplier of a product, as a condition of supplying the product to a customer, requires that customer to:

- deal only or primarily in products supplied by or designated by the supplier or his/her nominee, or

- refrain from dealing in a specified class or kind of product except as supplied by the supplier or his/her nominee.

Exclusive dealing would presumably increase the incentive of the distributor to maintain and promote goodwill in the relevant product(s) and also ensure that the supplier has control over the source of the product. Both factors would help mitigate the supplier's ex ante concern about counterfeited goods being sold at the retail level.

All of the aforementioned distribution restraints have the characteristic of directly reducing intrabrand competition at points of sale. Such reductions, in turn, raise concerns about price competition and entry conditions at the manufacturing level of the particular market. One relevant premise is that the greater the number of distributors and retailers of any given brand in any given market, the greater the likelihood that price discounting will occur at the retail level. In turn, the greater the degree of price competition at the retail level, the greater the likelihood of price competition at the manufacturing level.[2] Thus vertical restraints could, under certain conditions, lead to greater pricing cohesiveness at the production level. One implication of this would be a reduction in the vector quality (X_j) available for any given income level.

Vertical restrictions, especially those related to exclusive dealing, may also serve as a barrier to entry for new firms or as a barrier to expansion for existing firms. The empirical relevance of exclusive dealing to entry barriers was explored in a recent case before the

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2. An extensive development of this argument can be found in Lester Telser, "Why Should Manufacturers Want Fair Trade?" Journal of Law and Economics 3 (October 1960): 86-105.

Restrictive Trade Practices Commission (RTPC). The respondent in the case was Bombardier Limited, whose Recreational Products division manufactures and distributes recreational vehicles, accessories and parts, and sportswear. Ski-Doo and Moto-Ski are two lines of snowmobile products and are registered trade marks of the respondent. Bombardier acknowledged that it entered into exclusive agreements with dealers in specific geographic areas, whereby the independent dealers undertook to deal exclusively in one of Bombardier's brands of snowmobile. Bombardier actively enforced the exclusive franchise clause in its dealer agreements and terminated its supply relationship with eight dealers who breached the exclusive-dealing condition.

The concern of the Director of Investigation and Research (the applicant) was that Bombardier's exclusive-dealing arrangement impeded entry into the industry by new manufacturers of snowmobiles and also impeded expansion of sales by existing rivals of Bombardier. The thrust of the Director's argument was that barriers to entry at the distribution stage (owing to exclusive dealing) exacerbated barriers to entry at the manufacturing stage. More specifically, the Director alleged that entry barriers at the distribution stage would have been significantly reduced had dealers been able to spread their overhead costs over sales of more than one product line. After reviewing the evidence, the Commission concluded that there were no substantial entry barriers at the retail stage of the industry and, furthermore, that there was no evidence that Bombardier's exclusive-dealing arrangement had significant anticompetitive effects.[3]

Notwithstanding the decision in the Bombardier case, some observers have discounted the competitive concerns associated with restrictions on trade mark licensing, since under the amended Combines Investigation Act, the RTPC has the power to restrict a number of relevant market practices if they can be shown to reduce competition significantly. However, McDonald suggests that very few such distribution systems will be affected by the new legislation, in part because of the provision in section 31.2(2) (of the Combines Investigation Act) to the effect that "product" as referred to in the section will not be defined with reference to a branded name or trade mark, entitling the customer to that branded item, unless that brand occupies "such a dominant position in the market as to substantially affect the ability of a person to carry on business in that class of articles unless he has access to the [particular brand]."[4]

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3. See Bombardier Ltd. v. Restrictive Trade Practices Commission (1980), 48 C.P.R. (2d) 248; 113 D.L.R. (3d) 295.

4. Combines Investigation Act, R.S.C. 1970, c. C-23, as am. by S.C. 1974-75-76, c. 76, s. 12; see also Bruce C. McDonald, "Reviewable Marketing Practices in Canada," Antitrust Bulletin 22 (Winter 1977): 801-32.

The literature regarding the impact of vertical restrictions on conditions of entry is extremely diffuse and defies easy summation.[5] Suffice it to note that where no other barriers to entry exist, vertical restrictions raise no a priori structural concerns. Moreover, where one or more sectors of an industry are already effectively monopolized, vertical restrictions are mostly concerned with fixing the industrial stage at which potential monopoly rents are realized. The structural concerns about vertical restrictions therefore arise in those where the costs of entry at *any* stage of *an* industry are significantly increased by vertical restrictions (or vertical integration) imposed (or undertaken) by existing firms. Since in certain cases it is quite difficult to make such evaluations, the determination of whether trade mark licensing restrictions significantly raise costs of entry (or expansion) must proceed on a case-by-case basis.

Vertical restrictions and the free-rider problem. The competitive concerns raised by vertical restrictions are not expeditiously disposed of by simply prohibiting such restrictions tied to trade mark usage. The basic argument here is tied to the concept of the free rider. This concept has greatest a priori relevance in the case of products (or services) requiring extensive pre-sale marketing efforts, both to inform customers of the products' capabilities and to instruct customers on how to use the products optimally.[6] In such cases, it is a plausible concern on the part of any one dealer that the substantial efforts in pre- and post-sale servicing will stimulate demand for the product throughout the entire distribution network, notwithstanding that other dealers offer minimal pre- and post-sale servicing. Indeed, since the latter are effectively free riding on the efforts of the former, they would be able to charge a lower price than the service-intensive dealers and earn above-average profits, while the service-intensive dealers would presumably suffer losses. Such a result would clearly represent a disequilibrium and would presumably lead to a disappearance of the service-intensive end of the distribution network.

The free-rider problem diminishes as the number of authorized dealers decreases or as dealers are required to specialize in a given product line, since the manufacturer can more effectively police the behaviour of his or her distributors. Also, requiring the distributor to rely largely or exclusively on a single manufacturer's product line provides the distributor with a stronger incentive to promote goodwill in the product. By the same token, agreements undertaken by the

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5. For a review of the relevant literature and an extensive bibliography, see F.M. Scherer-Boulton, Vertical Control of Business (Cambridge, Mass.: Ballinger Publishing Co., 1978).

6. The concept could also have relevance where follow-up customer servicing was important and where the servicing could be obtained from any authorized dealer.

licensee not to undertake direct or indirect sales or to appoint other dealers in the exclusive licensee's designated territory provides the latter with an added incentive to invest in promoting goodwill for the manufacturer's product line.[7]

The foregoing analysis suggests that it may be difficult in a substantial percentage of cases to make an a priori determination about the sign (let alone the magnitude) of the welfare effects of vertical marketing restrictions tied to a trade mark. In these cases, a careful evaluation must be made of potential anticompetitive consequences on the one hand, and potential free-rider problems on the other. For the purpose of evaluating the broad competitive impact of vertical marketing restrictions, however, a more general consideration of the issues seems appropriate.[8]

Horizontal barriers to entry. A major concern about trade mark use is that within any product class, advertising and other promotional activities tied to brand-name products create brand loyalties which, in turn, act as a potential entry barrier.[9] There are two broad schools of thought on this matter. One school holds that advertising is persuasion. As such, it increases market power and results in higher consumer prices. The other believes that advertising is information machinery for the existence of efficient markets and well-informed consumers. As such, it promotes competition and lower prices.

Horizontal barriers to entry are primarily seen to be the indirect result of brand-name advertising, which allegedly makes the demand for existing products less price-sensitive, or (in economists' terminology) more price inelastic. As a result, pricing below that of already existing brands may not be a particularly effective strategy for new firms or for small firms seeking to expand their market share. As a consequence, entrants may themselves be forced to expend substantial sums on brand-name advertising. However, if the advertising function is characterized by significant economies of scale, new firms (and existing

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7. For an explanation of restrictive covenants in franchise agreements that follows this line of reasoning, see Benjamin Klein, "Transportation Cost Determinants of Unfair Contractual Agreements," American Economic Review 70 (May 1980): 356-62.

8. Chapter VI will present a framework to evaluate the general a priori relevance of competitive concerns raised by vertical marketing restrictions.

9. It is relevant, if somewhat trivial, to emphasize that trade mark protection acts as a barrier to entry for those who would duplicate the distinguishing mark of the trade-marked good or service in the absence of prohibitions against infringing.

small firms) may find themselves at a significant disadvantage.[10] To the extent that trade mark protection enhances the ex ante profitability of brand-name advertising (for reasons discussed in the preceding chapter), it might therefore contribute to higher costs of entry into given product categories.

It should be noted that in extreme cases, product names that have become virtually generic names in a product category (e.g., Coca-Cola, Xerox) create special problems for entrants. However, even in these cases, the owner of a trade mark has a limited monopoly. Specifically, commercial use of the mark cannot be prevented when it is employed not to identify but solely to give information about goods. Thus in spite of one company's ownership of the trade mark "Buick," a competitor could advertise that "our parts can be used on Buicks," provided he or she did not create the impression of a business association with the Buick manufacturer. There is some doubt, however, about the extent to which a competitor can use trade marks in comparative advertising (e.g., claiming that a product is preferred in tests to a rival's product) without contravening the Trade Marks Act.[11] The most famous Canadian case in this respect is Clairol International v. Thomas Supply and Equipment,[12] which prevented Thomas (Revlon) from using the Clairol mark in colour comparison charts, packages and brochures.

The competitive (or structural) implications of trade mark protection viewed in a horizontal dimension therefore primarily relate to the behaviour induced by trade mark protection. It was argued in Chapter III that strengthening and extending property rights in trade marks would promote the ex ante profitability of introducing new products. To this extent, it would probably encourage associated promotional expenditures such as advertising.[13] Thus the impact of trade mark protection

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10. A summary of this argument can be found in T.S. Wilson and W.S. Comanor, "Advertising, Market Structure and Performance," Review of Economics and Statistics 49 (November 1967): 423-40. Harold Demsetz, "Barriers to Entry," American Economic Review 72 (March 1982): 47-57, emphasizes that ultimately it is the cost of information, not advertising expenditures and scale economies, that constitutes the relevant barrier to entry. However, the issue still remains: Does advertising improve the quality of information in the market or does it introduce "noise" that reduces consumption efficiency?

11. R.S.C. 1970, c. T-10. Section 22(1) prohibits the use of a trade mark registered by someone else in a way "likely to...depreciat[e] the value of the goodwill attaching thereto."

12. Clairol International v. Thomas Supply and Equipment (1968), 55 C.P.R. 176.

13. As noted in Chapter III, the relationship between trade mark protection and advertising is potentially complex. For example, one can argue that if producers had to rely upon the demonstration of goodwill

on horizontal barriers to entry can be viewed largely as the consequence of increased advertising and other promotional expenditures.

Evidence on advertising and market structure. The empirical literature dealing with the relationship between advertising and entry conditions is extensive.[14] The studies can be divided into those that examine the relationship between advertising intensity and structural conditions such as industrial concentration, relative market shares and elasticities of demand and those that examine the relationship between advertising intensity and performance measures, particularly price and quality components of output.

In reviewing available studies of the relationship between advertising and demand elasticities, one finds support for each of the two basic views of advertising: that advertising decreases or that it increases price sensitivity. The majority of studies reporting that advertising increases price sensitivity looked at consumer prices, while most reporting the opposite view examined prices at the factory level.[15] The latter is consistent with findings that advertising intensity may be related to retailers' gross margins; that is, the effect of national brand advertising may be to lower retailers' gross margins. It is also consistent with Porter's hypothesis that if the manufacturer can develop a brand image, the retailer has very little power because the retailer is little able to influence the buying decisions of the consumer in the store. Especially for convenience goods with a strong brand image, the manufacturer's market power vis-à-vis the retailer is very high. In nonconvenience goods, however, the image and reputation of the store may be more important to the consumer than the manufacturer's brand.[16] Hence, reducing trade mark protection may have less impact on retailers' gross margins in the case of nonconvenience goods than in the case of

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to protect against trade mark infringement, they might advertise more intensively than otherwise in the early stages of product introduction to secure goodwill as soon as possible. On the other hand, this effect may be more than offset by a reduction in new product introduction and related advertising. Furthermore, existing products may require less advertising with fewer competitors coming into the market.

14. Extensive reviews of individual studies can be found in Paul W. Farris and Mark S. Albion, An Investigation into the Impact of Advertising on the Price of Consumer Products (Cambridge, Mass.: Marketing Science Institute, 1979); James M. Ferguson, Advertising and Competition: Theory, Measurement, Fact (Cambridge, Mass.: Ballinger Publishing Co., 1974); and D.A. Worchester, Jr., Welfare Gains from Advertising: The Problem of Regulation (Washington, D.C.: American Enterprise Institute for Public Policy Research, 1978).

15. See Farris and Albion, Impact of Advertising, p. 15.

16. See Michael Porter, Interbrand Choice, Strategy and Bilateral Market Power (Cambridge: Harvard University Press, 1976), p. 120.

convenience goods. There is some empirical support for the hypothesis that the inverse relationship between advertising and retail gross margins is stronger for convenience than for nonconvenience goods, although the evidence is quite limited.

With respect to the previously cited findings, it should be noted that a potentially significant simultaneity problem exists. More specifically, it is possible to show that firms facing inelastic demand curves have a greater incentive to advertise than firms facing elastic demand curves, all other things being constant. This is particularly true if the inelasticity reflects market ignorance about superior properties of the goods in question.[17] As a result, a spurious negative correlation might be introduced into ordinary least squares estimates of the relationship between advertising and price elasticity of demand.

Empirical studies of the impact of advertising have also considered its effect on industrial concentration and particularly on the market share distributions of large versus small firms. The implicit hypothesis is that if advertising primarily serves an informational function, it should promote entry by new firms and the growth of small firms who have superior price/quality product lines. On the other hand, if advertising primarily serves as a barrier to entry, it should favour the maintenance of market shares by firms already enjoying dominant positions.[18] The evidence in this regard, on balance, supports the conclusion that an increase in the real volume of advertising messages causes an increase in the sales of smaller sellers relative to the sales of larger sellers. Related studies have found that an increased emphasis on the use of brand names tends to destabilize rather than stabilize market share distributions, on balance.[19] However, the evidence also suggests that the relationship between advertising and brand loyalty, to the extent that one exists, should be treated as a product specific rather than a general attribute.[20] That is, while in the majority of cases the impact of advertising is to reduce concentration, it may serve as a barrier to entry (or to expansion) by new producers in specific

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17. This point is made in Ferguson, Advertising and Competition, p. 65.

18. This hypothesis is rigorously derived in comparing the advertising to the no-advertising case in W.J. Lynk, "Information, Advertising and the Structure of the Market," Journal of Business 54 (April 1981): 271-303.

19. For example, see B.T. Allen, "Structure and Stability in Gasoline Markets," Journal of Economic Issues 15 (March 1981): 73-94, and J.B. Heisel, "Entry, Multiple-Brand Firms and Market Share Instability," Journal of Industrial Economics 29 (June 1981): 375-84.

20. See Robert C. Blattberg and Subrata K. Sen, "Market Segments and Stochastic Brand Choice Models," Journal of Marketing Research 13 (February 1976): 34-45.

cases. For example, Nagle shows that the statistically estimated positive relationship between industry advertising intensity and profit rates in Wilson and Comanor's famous study is sensitive to the inclusion or exclusion of four industries: cereals, soaps, drugs and perfumes. More specifically, their estimated relationships are not statistically significant when these four industries are dropped from the original sample.[21] Thus Nagle's evidence suggests that to the extent that the advertising-profit relationship reflects the influence of barriers to entry tied to advertising,[22] such barriers may be significant in only a handful of convenience goods markets. Leffler goes even one step further in suggesting that avertising's effects need not be the same in different markets or in different settings within a market.[23]

In summary, studies of the relationship between advertising and market structure support the notion that, on balance, advertising promotes a more competitive market structure and enhances price competition. One might conclude, by extension, that trade mark protection, by encouraging the introduction of new products and brand-related advertising, on balance, promotes competition. In particular, enhanced trade mark protection might be seen to encourage the displacement of less-efficient by more-efficient firms and to foster an environment in which firms are generally more attentive to producing improved products and reducing costs of production. If this is true, trade mark protection would contribute to increased economic surplus by increasing the amount of $\{X_j\}$ attainable at all income levels. However, it is conceivable that, as an empirical matter, the substantial anticompetitive effects of advertising in a handful of markets offset the procompetitive effects in other markets generally. This suggests a research focus which would identify those industries in which the anticompetitive effects of brand-name advertising are of greatest a priori concern, and then evaluate the impact of advertising and other promotional activities in those industries.

Advertising and Pricing

More direct support for the hypothesis that advertising promotes competition and improved efficiency would be provided by evidence that advertising contributes to lower overall prices. The available evidence

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21. See Thomas Nagle, "Do Advertising-Profitability Studies Really Show that Advertising Creates a Barrier to Entry?" Journal of Law and Economics 24 (October 1981): 333-49, and Wilson and Comanor, "Advertising," pp. 423-40.

22. A criticism of this interpretation of the evidence is that it is spurious; that is, ex ante more profitable products stimulate greater advertising.

23. See Keith Leffler, "Persuasion or Information? The Economics of Prescription Drug Advertising," Journal of Law and Economics 24 (April 1981): 45-75.

implies that the outcome of manufacturers' advertising on the absolute price level of a product category is ambiguous. This may be partially due to the fact that while advertising promotes more effective price-searching behaviour on the part of the buyer, it also redistributes market power from retailers to manufacturers in specific product lines. The composite effect in certain cases may be lower prices at the manufacturers' level and in other cases, higher prices. There is more consistent empirical support for the proposition that advertising contributes to lower quality adjusted prices in the retailing sector.[24] The problem in these studies is to control for quality, since highly advertised products tend to have both higher prices and higher quality. Indeed, as argued in Klein and Leffler,[25] extensive and expensive advertising might be an indirect signal to consumers that the advertiser's product is of superior quality and therefore commands a price premium in the marketplace. Since there are very few instances in which an absolute standard of comparison in terms of quality is available, the evidence on the relationship between advertising and the absolute price level in a product category is hardly definitive.

As was the case in the discussion of advertising and market structure, the impact of advertising on price competition likely varies across different markets. For example, Farley concludes that for certain consumer products, advertising tends to be associated with price level stability.[26] Simon's study of 35 brands reveals that the magnitude of price elasticity varies over the life cycle of a product and therefore suggests that the impact of advertising on price competition might also vary over this cycle.[27] Glazer found that while advertising

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24. Relevant studies include Lee and Alexander Benham, "Regulating through the Professions: A Perspective on Information Control," Journal of Law and Economics 18 (October 1975): 421-47; John F. Cady, Restricted Advertising and Competition: The Case of Retail Drugs (Washington: American Enterprise Institute, 1976); and R.L. Steiner, "Does Advertising Lower Consumer Prices?" Journal of Marketing 37 (October 1973): 117-34. These studies are reviewed in Worchester, Welfare Gains from Advertising, pp. 10-31.

25. See Benjamin Klein and Keith Leffler, "The Role of Market Forces in Assuring Contractual Performance," Journal of Political Economy 89 (August 1981): 615-41.

26. See John Farley, "Why Does Brand Loyalty Vary across Products?" Journal of Marketing Research 1 (November 1964): 9-14.

27. See Hermann Simon, "Dynamics of Price Elasticity and Brand Life Cycles: An Empirical Study," Journal of Marketing Research 16 (November 1979): 439-52. Simon's finding is similar in spirit to Leffler's finding in the latter's study of the drug industry. Specifically, Leffler concludes that pharmaceutical advertising serves to inform phy-

plays an important role in promoting price competition among supermarkets, it may take only a small fraction of the normal level of advertising in the market to ensure a fair degree of competition.[28]

In summary, the literature (especially more recent studies) suggests that the effect of advertising on prices and on other indices of competition is not the same in different markets and, indeed, may not be the same at different stages of a market's growth and development. In this regard, several industries have been identified as presenting special concerns for policymakers. Perhaps the most intensively studied is the pharmaceutical industry.[29] Statman and Tyebee,[30] among others, express the concern that the carry-over effects of trade mark rights are embodied in brand loyalty towards the trade marks of patented drugs and that little competitive pressure from drugs with the same generic name is exerted on patented drugs after patent expiration.

Gordon and Fowler discuss legislation adopted by the federal government in 1969 that compelled a manufacturer of a patented drug to grant a licence to any firm that requested it, subject to a modest royalty payment and subject to the final pharmaceutical preparation being made in Canada. Initially, the barriers to entry posed by the brand-name products were sufficiently discouraging that few compulsory licences were issued until legislation was enacted to deal with this problem. To improve the situation, the Department of National Health and Welfare started in 1970 to publish the RX Bulletin, a monthly listing of drugs tested by the Health Protection Branch for identity, assay, weight variation and other properties. Drugs that passed were listed by group under a generic heading and ranked in ascending order of price. The Ontario government, in 1970 under its PARCOST program, began publishing a Drug Benefit Formulary, which lists all drugs approved for reimbursement in the province and identifies the different brands of a

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sicians about the existence and characteristics of new products, while producing a brand-name recall effect that favours established producers. Thus the impact of pharmaceutical advertising on competition might be sensitive to the life cycle stage of the drug group in question. See Leffler, "Persuasion or Information?" p. 75.

28. See Amihai Glazer, "Advertising, Information and Prices: A Case Study," Economic Inquiry 19 (October 1981): 661-71.

29. A broad study of the drug industry in Canada is provided by Myron J. Gordon and David J. Fowler, The Drug Industry: A Case Study of the Effects of Foreign Control on the Canadian Economy (Ottawa: Canadian Institute for Economic Policy, 1981).

30. See Meir Statman and Tyzoon Tyebee, "Trademarks, Patents and Innovation in the Ethical Drug Industry," Journal of Marketing 45 (Summer 1981): 71-81.

drug that are considered acceptable substitutes for the original patented product.[31] Gordon and Fowler conclude that, while there was a relative decline in the price of drugs under compulsory licensing, these policies did not result in a flood of competition and a widespread fall in price. They ascribe this to barriers to entry in production and promotional pricing by branders.[32]

Kerton and Chowdhury express a more optimistic assessment of the Ontario government's PARCOST program. More specifically, they conclude that the information supplied under the program helped to bring about a decrease in the average price of interchangeable drugs covered by the program.[33] Five other drugs which were insulated from substitution by a rule against interchangeability showed, in contrast, no sign of price decrease. Their study also suggests that lower-priced but effective brands in general increased their market shares in response to the policy. Furthermore, while the major effect of the program occurred in the first three years after its introduction, the market share gains of the lower-priced brands were retained during the rest of the period examined.

Leffler's econometric analysis provides support for the conclusion that pharmaceutical advertising produces brand-name recall effects that favour established producers facing new competition. However, his results also suggest that advertising informs physicians about the existence and characteristics of new products, thereby serving to speed the entry of superior new products while retarding the entry of later, low-priced close substitutes. Leffler concludes that the welfare implications of limitations on the promotional activities of pharmaceutical firms are therefore uncertain.[34]

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31. The Ontario Pharmacy Act was amended to allow a pharmacist to substitute any interchangeable drug from those listed in the Formulary for the prescribed one, unless specifically forbidden by the doctor. And on all prescriptions paid for by the province, the pharmacist is reimbursed at the lowest list price in the Formulary.

32. See Gordon and Fowler, Drug Industry, pp. 96-97.

33. See R.R. Kerton and T.K. Chowdhury, "The Impact of the PARCOST Program on Prescription Drug Prices in Ontario," Canadian Public Policy 7 (Spring 1981): 306-17. Criticism that Kerton and Chowdhury underestimate the impact of the federal government's compulsory licensing program is found in Ned Ellis, "Comment on the Impact of the PARCOST Program on Prescription Drug Prices in Ontario," Canadian Public Policy 8 (Summer 1982): 361-64.

34. See Leffler, "Persuasion or Information?" pp. 74-75.

Food products, especially ready-to-eat cereals, have also been prominently identified in studies of the entry-deterrent effects of trade marks. For example, Schmalensee argues that the privately optimal entry deterrence strategy for established producers involves high prices, brand proliferation and some degree of overspending on advertising. That is, the most credible and durable barrier to entry is to surround an entrant with new brands.[35] A basic feature of Schmalensee's argument is that the introduction of new brands is a more credible threat than lowering prices or increasing advertising, since it is a less-reversible decision. The Federal Trade Commission, in 1970, charged that the four major cereal producers promoted their trade marks through advertising and concealed the nature of the products while creating artificial differentiation between products. Compulsory licensing of trade marks was one remedy sought by the Commission. With the election of the Reagan Administration, the Commission dropped its case against the cereal manufacturers.

A final industry worthy of mention is petroleum, specifically that segment concerned with the retailing of petroleum products. The industry is cited by some as an example of how established brand names initially served as a barrier to entry to independent marketers of gasoline. However, the well-established house marks of the mass-merchandisers such as Canadian Tire, Woodwards and Sears served to overcome the motorists' perception that nonmanufacturer brands of gasoline might be of lower quality, and therefore facilitated the entry of retail chain operators into the gasoline market.[36]

This cursory overview of several select industries serves to underscore the importance of undertaking detailed microeconomic studies of the relationship between trade marks and horizontal barriers to entry. The relationship is almost certainly not identical across industries, nor even across different markets within a given industry. It

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35. See Richard Schmalensee, "Entry Deterrence in the Ready-to-Eat Breakfast Cereal Industry," Bell Journal of Economics 9 (Autumn 1978): 305-28. Of course, Klein and Leffler would argue that the correlation between high prices and extensive advertising reflects the fact that overspending on advertising indicates a nonsalvageable cost gap between price and production costs, that is, the existence of a price premium which, in turn, reflects a quality premium. See Klein and Leffler, "Role of Market Forces," pp. 615-41.

36. See Government of Canada, Report of the Royal Commission on Concentration (Ottawa: Supply and Services Canada, 1978), p. 89.

further suggests that broad cross-section statistical studies may be an inadequate substitute for detailed industry case studies.[37]

Price difference across markets. It has been noted above that vertical marketing restrictions constructed around trade mark licensing arrangements can directly facilitate geographic price discrimination. A particular concern for Canadian policymakers is that multinational firms may employ restrictive trade mark licences to prevent multiple sourcing of the parent's product line in Canada while realizing higher price over cost markups in Canada than in their home markets.[38]

A related concern is that sellers will employ multiple brand names to segment customer markets in order to price discriminate among purchasers. It should be noted that such multiple branding would be of concern not only because of potential transfers of income from Canadian consumers to foreign sellers (where the sellers of multiple brands were foreign owned), but also because multiple branding of essentially the same good is unlikely to contribute to lower consumer search costs or to welfare-increasing product differentiation.

In the case of price differentials across either international or purely domestic markets, the welfare implications are not entirely straightforward. One issue raised is whether the differentials can be cost justified. For example, it is possible that there are certain idiosyncratic costs associated with serving specific markets that necessitate the seller receiving correspondingly higher prices in order to cover costs. Moreover, vertical restrictions such as exclusive dealing may be required to preserve market segmentation and prevent free riders from benefitting from the original seller's marketing efforts while charging a lower price. In these cases, marketing restrictions tied to trade mark licences may promote higher prices but also higher levels of service. The critical empirical issue is whether market segmentation is indeed associated with a higher level of service, or purely with a higher price-cost margin. A related issue is whether competition from other sources is sufficient to ensure that price differentials across markets are just enough to compensate the seller for the different marketing services provided.

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37. For one such cross-section study documenting a positive relationship between an industry's advertising intensity and barriers to entry into the industry, see Dale Orr, "The Determinants of Entry: A Study of the Canadian Manufacturing Industries," Review of Economics and Statistics 56 (February 1974): 58-66.

38. In the literature, this is identified as the parallel import question. This issue will be considered in more detail in Chapter V.

Trade mark protection might also facilitate price discrimination indirectly by encouraging brand-name advertising which, in turn, helps producers segment markets. In other words, advertising may facilitate multiple branding of products with clearly related characteristics by fostering brand loyalties for specific products among different customer classes.[39] The extent to which brand loyalty is a useful tool for segmenting markets is open to debate. For example, in the case of grocery products, brand-loyal customers do not seem to differ from other customers in terms of attitudes, personality and socioeconomic characteristics; amount purchased; or sensitivity to pricing, dealing, retail advertising, or the introduction of new brands.[40] In other product categories, however, brand loyalty might serve more usefully as a market-segmenting device.[41]

The research implications of the foregoing observations are not entirely obvious. Certainly, price discrimination that serves no useful social purpose is undesirable. However, it is ordinarily an extremely onerous task to determine when price differentials across markets either are unwarranted by product differences (where the latter include differences in ancillary delivery services) or when these differentials permit the introduction of a product that would otherwise not be produced. As a result, it does not seem fruitful to focus research on the market segmentation issue per se. Rather, the more tractable and more important research issue is the impact of trade marks on competitive conditions in markets where trade marks are an important form of property right.

Summary and Conclusions

The potential impact of reduced competition on domestic economic surplus is twofold: production efficiency could be reduced, leading to higher costs and smaller consumer and/or producer surplus; and producers may exploit entry barriers by price discriminating. The primary concern associated with the potential for price discrimination is related to the prospect of income transfers from domestic consumers to foreign produ-

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39. For example, it has been alleged that the product differentiation engaged in by North American automakers is primarily designed to segment customer markets by income category and, presumably, by price sensitivity.

40. See Blattberg and Sen, "Market Segments," pp. 34-45.

41. It should be noted that brand proliferation has the potential to facilitate the extraction of consumer surplus even in the absence of price discrimination. For a rigorous demonstration of this point, see W.J. Adams and J.L. Yellen, "What Makes Advertising Profitable?" Economic Journal 87 (September 1977): 427-49.

cers. On the other hand, increased competition would presumably have salutary effects on production efficiency and should contribute to increased economic surplus.

Enhanced trade mark protection could affect competitive conditions in specific market segments in several ways. One effect is related to the incentives provided by trade mark protection to introduce new brands (especially brands at the high-price end of the market) and to undertake advertising tied to specific marks. It is unclear whether, and to what extent, such induced behaviour promotes or represses new entry and interfirm competition. Another effect is related to the choice of vertical marketing channels. Specifically, it was argued in this chapter that reduced trade mark protection might promote greater use of vertical marketing restrictions, such as exclusive dealing. The welfare impact of such a development is also unclear. Presumably, it would raise concerns about reduced competition. However, it could also facilitate the introduction of specific product/service commodity bundles that might otherwise not be sustainable marketing strategies on the part of producers. The increased use of vertical marketing restrictions has potentially important distributional implications, since it would presumably shift, on the margin, bilateral bargaining power from manufacturers (many of which are U.S. subsidiaries) to Canadian-owned retailers.

There would appear, therefore, to be several research issues that need to be addressed in evaluating the impact of trade mark protection on competition. One broad issue is the likely impact of reduced or enhanced trade mark protection and enforcement on the way manufactured goods are marketed. A second is whether these identified changes would promote or retard competition at the product level. A third is the impact of trade marks and trade mark-related advertising on conditions of entry.

Chapter V

SOME POLICY ISSUES RELATED TO THE TRADE MARKS ACT

Introduction

A number of broad and many specific proposals have been suggested to alter the Trade Marks Act in recent policy-oriented analyses. Some of these suggestions would have the effect of limiting the trade mark owner's scope to preclude use of the mark, or of setting more restrictive conditions for registering trade marks under the Act. In order to evaluate the net social benefits of these suggested changes, it is important to identify the key underlying research issues.[1]

Trade Marks as Indicators of Product Origin and Product Standards

As noted in Chapter I, the Economic Council of Canada views the information value of a trade mark as stemming from an indication of the manufacturer or seller who vouches for a product, and/or as stemming from a clear statement of product standards or characteristics. This view leads the Council to recommend a clarification of the form of marks. Its specific recommendations, if implemented, would have the effect of allowing trade marks to be registered only if they were clear indicators of source or origin, or if they defined product standards.[2]

Conversely, the authors of a paper on the Trade Marks Act criticize the Economic Council's recommendations as being too ambitious and unrealistic.[3] More specifically, they question whether consumers per-

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1. Combined with the analysis in the first four chapters, this exercise should contribute to an identification of the central research issues related to an overall evaluation of the Trade Marks Act. This latter task will be taken up in Chapter VI.

2. For a more detailed specification of these proposals, see Economic Council of Canada, Report on Intellectual and Industrial Property (Ottawa: Information Canada, 1971), pp. 283-15. It should be noted that the proposal does not appear in Bill S-11; however, this paper intentionally takes a broader view of potential changes to the Act than is contained in Bill S-11. While there is a tradition in trade mark law that source and origin are not synonymous, this distinction has not been recognized in the courts.

3. Department of Consumer and Corporate Affairs, Working Paper on Trade Marks Law Revision (Ottawa: Information Canada, 1974), p. 25.

ceive trade marks to be representations of a certain set of fixed product characteristics. They also conclude that consumers are not concerned with what the role of the source is in relation to the production and/or distribution of the trade-marked products, but rather that they are concerned only with the power to control the use of a trade mark and thereby to control the qualities of the products distributed in association with the mark. In effect, the Council expresses the implicit belief that the value of a trade mark lies in its certification attribute. As a statistical proposition, the Council is suggesting that requiring indications of source or origin, or requiring the definition of product standards will improve consumer information about the $\{X_j\}$ vector and its relationship to the $\{Z_i\}$ vector.

Source or origin. The implicit premise of the Economic Council's suggested clarification of trade mark forms is that the benefits of the additional information provided will exceed the costs. However, neither the potential benefits nor the potential costs were identified in the limited debate concerning the Economic Council's recommendations. The present analysis in Chapters II through IV suggests that the potential benefits and costs of revisions to the Act may be complex given potentially important indirect consequences of product differentiation and advertising. For example, indicating the source of production of a commodity clearly provides the consumer with more information, everything else being constant. However, the value of this information to the consumer is questionable if it does not contribute to promoting quality assurance or lowering search costs in some other way. One can certainly conceive of situations in which information about the origin of production would lower consumer search costs. For example, the knowledge that a particular good is made in Canada might make the good more attractive to an economic nationalist.[4] Where such information does contribute to more efficient consumer choice, however, it would seem that producers or sellers already have an incentive to provide the information, since this action would lower the effective cost of the commodity to the purchaser. Therefore, where such information is not voluntarily provided, a strong a priori case can be made that the costs of information provision exceed the benefits.

One potentially important exception to this assertion is private brands produced for retailers by national manufacturers. One might argue that such producers have a strong incentive to disguise the origin of the private brands they produce for retailers, since the nationally advertised brands frequently sell at a premium to private brands in local markets. If registration of the private brand required identification of source or origin, it could jeopardize product market segmentation based upon national or private brand distinctions.

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4. In fact, the Government of Canada has been urging Canadian manufacturers to identify more clearly that their products are made in Canada as a way of boosting sales.

There is some evidence that many manufacturers are concerned about the risk of consumers recognizing similarities between private and national brands. Some companies put provisions in contracts to prevent mention of the supplier's name in promotion.[5] Nevertheless, for product lines where personal selling and service at the point of sale are a normal part of the marketing pattern, consumers can be (and often are) told by salespersons that the private brand is made by a certain manufacturer, even though that manufacturer's national brand is not available in the same outlet. Notwithstanding this disclaimer, it is likely that consumers are less than fully knowledgeable about the common sources of many national and private brands. It is also plausible that in cases where important product characteristics can be determined by inspection (i.e., search goods), and where these characteristics are identical across specific national and private brands, systematic price differentials between national and private brands would be unsustainable if consumers were informed of the common source of origin. However, where systematic price differentials reflect price discrimination on the part of foreign producers, eliminating such differentials could improve overall domestic economic surplus, everything else remaining constant.

Holding aside the issue of whether requiring manufacturing source to be identified as a condition of registration is feasible,[6] its social desirability depends, in part, upon whether price differentials are inconsistent with differences in product characteristics in markets where trade marks play an important information and signalling function. Presumably, the existence of such inconsistencies would represent a disequilibrium in a perfectly competitive market. That is, it would encourage the entry of new producers who would "arbitrage" away such inconsistencies.[7] Of course, in the imperfect real world, information and transactions costs, and barriers to entry may prevent or delay this arbitrage process.

The proposal requiring identification of source in registering private label trade marks is closely related to the issue of multiple branding discussed in Chapter IV; that is, should a producer be allowed to register different trade marks for essentially the same product? In considering the multiple branding issue, it was suggested that market segmentation by mark might be required to preserve the high-service end

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5. See Victor J. Cook and Thomas F. Schutte, Brand Policy Determination (Boston: Allyn and Bacon, 1967), p. 57.

6. One complication is that manufacturing origin will change from time to time.

7. Arbitrage may be defined as simultaneously buying and selling in two or more markets where prices for a good or service differ by more than the costs of the transactions.

of the market for a product.[8] The same argument might be relevant in instances of national versus private brand labelling. Videotape recorders, for example, could be sold in high-service retail outlets under the manufacturer's national brand name, and under private labels by large mass-merchandisers. Unless the markets can be segmented, the high-service retail outlets would not be able to charge the appropriate premium to compensate for their higher costs of service. For example, customers could go to the high-service outlets for information and then buy the product at a lower price from the mass-merchandiser. In the case of new "experience" goods especially, successful introduction often requires extensive information dissemination to consumers. Specialized retailing is usually an important component of this dissemination process. Thus legislation jeopardizing the ability of manufacturers to segment the retailing of national and private brand labels might impose indirect costs on consumers in the form of a slower rate of product innovation and reduced levels of specialized retailing services.[9]

Private brand labels may represent, in certain cases, outlets for manufacturers who are producing at below minimum efficient scale. The price discrimination associated with market segmentation between consumers of national and private brands may allow these producers to fill out capacity with profitable marginal sales. Were all infra-marginal units effectively required to be sold at the price of the marginal units, it is possible that the producer would forego filling out capacity with private label sales. That is, the producer might realize a higher profit by producing only for national branding and by foregoing sales to private-label branders than by producing for both markets but effectively selling all output at the single profit-maximizing price given the combined demand curve for national and private brand customers. However, as long as additional units can be sold in private-label markets at prices that exceed marginal costs, the sales would generate positive economic surplus.

All of this is familiar territory to microeconomists. It is simply an application of the proposition that in imperfectly competitive markets, price discrimination can move the equilibrium solution closer to the perfectly competitive solution. The relevant distinction here is that the distribution of the welfare gain between producers and con-

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8. A similar possibility was noted in the case of vertical restrictions such as exclusive dealing.

9. We hasten to note that Article 7 of the Paris Convention for the Protection of Industrial Property (1925) does not permit refusal to register on the basis of the nature of the goods or services. As noted above, however, we do not feel constrained in this exercise to assume a status quo, since, were a change in the legislation to offer striking social benefits, the change might be made. We thank John Butler of Consumer and Corporate Affairs' Trade Marks Branch for drawing Article 7 to our attention.

owners is relevant when producers are foreign companies. Nevertheless, price discrimination associated with private labelling would provide some increment to consumers' surplus. This increment would be greater, the more price sensitive the demand for private label brands.

The main point of this excursion can be seen as an extension of an earlier query, specifically, Are price differentials between multiple-brand products generally consistent with differences in service levels in the pre- and post-point-of-sale markets? Where no significant differences exist, does multiple branding facilitate the exploitation of extent scale economies?

Definition of product standards. The notion that trade marks should better identify qualitative attributes of commodities in order to be registered is a fairly prevalent recommendation for reforming the Trade Marks Act. An extension of this position is the recommendation that essential consumer products (especially pharmaceuticals) should be required to be identified by their common or generic names.[10]

As with the proposed requirement to identify source or origin, the essential calculus for evaluating this proposal is whether the social benefits are likely to exceed the social costs. There seem to be two relevant issues here. One is whether consumers may invest too much confidence in product-related information tied to a registered mark. Some of the available research indicates that certification marks enjoy high levels of recognition and are perceived as an important source of product-related information. The findings suggest that consumers misperceive the correct objective information as provided in several well-known certification marks.[11] A second relevant issue is whether market failure prevents producers from supplying additional information about product quality, where such information has net social benefits.

The most evident source of potential market failure arises from the possibility that clear identification of qualitative attributes would increase the substitutability between new products and the pro-

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10. See World Intellectual Property Organization, "Industrial Property Aspects of Consumer Protection," mimeographed (Geneva, 1981), p. 15. We note that requiring the use of generic names is not possible under the Act and falls within the purview of Acts such as the Food and Drug Act. Again, however, it is the conceptual issue that is of concern here and not the mechanics of how such a change might be implemented, or indeed the problems associated with its implementation.

11. See, for example, M.V. Jaric and Dan Segal, "Consumer (Mis)Perceptions and Usage of Third Party Certification Marks, 1972 and 1980: Did Public Policy Have an Impact?" Journal of Marketing (Summer 1981): 135-56.

ducts of existing market leaders, thereby leading to increased price competition and lower prices. Clearly, existing market leaders have no incentive to contribute to strengthening the competitive potential of rival firms. Their reluctance to degrade brand preferences for their products by stressing their generic attributes in product advertising can therefore be expected. However, producers and sellers seeking to dislodge established market leaders do have some incentive to inform the public of the qualitative attributes of their products, particularly when the attributes of new and existing products are roughly comparable but the market leaders' products sell at higher markups over cost. While requiring existing trade mark holders to identify quality attributes as a requirement for maintaining or renewing trade mark registration would increase the amount of information available to consumers, the increase above market-determined levels might be marginal in many instances. Furthermore, the value of such additional information in terms of promoting substitutability among comparable products is questionable. Specifically, most studies have found that people are aware of information aids such as unit pricing, open dating and nutrient labelling, but few report using them.[12] However, some evidence was noted in Chapter IV suggesting that in the case of pharmaceuticals, generic classification and compulsory licensing did seem to promote the market share growth of unbranded and less well-known drugs.

The requirement to identify quality attributes would increase the administrative costs of the registration process. The extent of this increase over the low administrative costs of the current system may be substantial. A guide to the potential magnitude of the costs might be provided by examining the administrative costs of the PARCOST program, discussed in Chapter IV. Since what is suggested — as in the extreme of requiring product identification by generic name — is a movement away from product branding toward attribute labelling, the potential costs of such a policy would include any foregone efficiency benefits of product branding. Especially relevant are the recognition and recall advantages of a brand name, which presumably reduce the amount of information the consumer needs to purchase and transform the optimal (x_j) vector. The evidence related to these advantages suggests that, on balance, they are likely to be positive, although not necessarily in all markets. Moreover, their magnitude is questionable. Notwithstanding these advantages, there there is a concern about market power tied to trade mark protection, policies designed to increase elasticities of demand in relevant product markets could have socially beneficial effects. In considering the welfare impact of attribute labelling as a

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12. See K.W. Kendall and Len Fenwick, "What Do You Learn Standing in a Supermarket Aisle?" in N.L. Wilhite, ed., Advances in Consumer Research, vol. 6 (Ann Arbor, Mich.: Association for Consumer Research, 1979), pp. 78-85. The authors note that the relative importance rating for nutrition values has grown in recent years.

condition of registration, it would appear that two research issues are of principal importance: (1) To what extent do well-known trade marks assist the consumer to choose the $\{X_j\}$ vector most appropriate to his or her desired characteristics' set $\{Z_i\}$?; and (2) To what extent do well-known trade marks act as a barrier to entry for new products, or as a barrier to expansion for lesser-known brands?

Prohibition on Restrictive Licensing

In Chapter IV, the competitive concerns surrounding restrictive trade mark licensing practices, particularly those related to restrictions in vertical marketing systems, were discussed. The most prevalent concern in this regard is whether there should be prohibitions against parallel imports of trade-marked goods. Bill S-11 does not prevent a person from importing into (or exporting from Canada) or selling in Canada goods in association with a registered trade mark if such goods are substantially similar to the trade-marked goods, and if the registered owner of the trade mark is a person related to the person who applied the mark.[13]

In one proposal for revisions to the Trade Marks Act, it was suggested that prohibitions against parallel imports of trade-marked goods be waived where the importer is not bearing any of the cost involved in establishing a servicing network in Canada and is not providing the service, for example, attached to product warranty that Canadian consumers have come to expect for goods sold in relation to the trade mark.[14] In Chapter IV, it was noted that society faces a potential trade-off between the sustainability of certain marketing processes, especially service-intensive marketing outlets, and structural competitive conditions, including easier entry into relevant markets. It was suggested that the determination of the net social benefits associated with trade mark restrictions may not be easy in some industries. Whether Bill S-11 raises any significant concerns about the potential for free riding on advertising and other marketing expenditures of specific Canadian licensees might, therefore, require some investigation of industries where parallel importation has been an issue.

It would also seem that restrictions on parallel imports would not be prohibited when the imported goods have significantly different qualities from the goods sold under the authority of the Canadian mark

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13. The definition of a related person is given in the Trademark Act, 1979, Bill S-11, 1978-79 (30th Parl. 4th Sess.), s. 7(3).

14. See Consumer and Corporate Affairs, Trade Marks Law Revision, p. 246.

owner in Canada, apparently irrespective of the competitive consequences of those restrictions. Again, it would seem that a danger exists in applying per se rules in the area of vertical marketing restrictions, in this case ignoring the potential costs of higher barriers to entry.[15] Some indication of the relevance of this potential danger might be gained by identifying whether, in those industries in which parallel importation might be prevented, the parallel importation of related but not identical goods would have salutory effects on competition levels in those industries.

Summary and Conclusions

The various recommendations raised for analysis in this chapter identified a number of research issues that figured prominently in the theoretical analysis in Chapters II to IV. In particular, the role of trade marks in informing consumers about the attributes of different products is a relevant consideration in proposals that the identification of source of origin or of product attributes be required as a condition of registration. Also relevant in this regard is whether consumers misperceive the objective information provided in well-known certification marks. In essence, empirical analysis could determine whether the informing role of trade marks is generaly superior to that of certification marks, which identify source of origin and/or product attributes.

Another prominent set of issues identified in this chapter relates to the competitive implications of trade mark practices. More specifically, the impact of vertical marketing restrictions tied to the use of trade marks is an important consideration in evaluating the merits of strengthening or weakening the protection and enforcement of trade marks generally, as well as limiting the rights of trade mark owners to exploit their property rights by restricting the licensed use of their marks in specific ways.

Perhaps the most fundamental competitive issue raised in this and preceding chapters relates to the impact of trade mark protection and enforcement on the incentive of firms to introduce new brands, and, in turn, to the impact of brand proliferation on entry conditions and horizontal mobility within industries. The potential for established producers to exploit a brand-name preference as part of a limit-entry strategy was noted and discussed in Chapter IV. On the other hand, models which view advertising as primarily serving an informational role conclude that trade marks facilitate brand-related advertising which, in

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15. A similar position concerning the dangers of taking a per se position is found in Ulrich Loewenheim, "Trademarks and Free Competition within the European Community," Antitrust Bulletin 21 (Winter 1976): 727-49.

turn, promotes the introduction of better and/or lower-priced products, thereby encouraging greater competition. While numerous econometric studies have explored the relationship between advertising intensity and various structural and performance features of industries, they are inconclusive, primarily owing to one or another cross-section statistical bias. An improvement on the ambiguity of existing statistical results would seem to require more focused case-study analyses of specific markets.

A final broad research question raised in this chapter concerns the role of trade marks and the practice of price discrimination. At the same time, the use of different trade marks for essentially the same product could facilitate more efficient production. For example, it was noted that the use of private brand labels by retailers for goods that are similar to nationally known manufacturers' brands might enable producers to fully exploit extant economies of scale. Thus while price discrimination by manufacturers (many of which are U.S. subsidiaries) would presumably result in income transfers from Canadian consumers to, among others, shareholders in U.S. parent companies, the production efficiencies associated with market segmentation might, if passed on to consumers, result in the practice having net social benefits. The relationship between the use of trade marks and the exploitation of product- and plant-level economies of scale was an important research issue identified in this chapter, as well as in Chapter III.

Chapter VI

SUGGESTIONS FOR FUTURE RESEARCH

Overview of the Main Issues

The first chapter placed the issue of the optimal degree of trade mark protection and enforcement into an industrial organization paradigm by focusing attention on the structural and behavioural changes that would attend a change in the extent and strength of the trade mark property right under the Act. A number of hypotheses were developed, largely based on deductions from abstract analysis and anecdotal evidence. To recall, it was suggested that strengthening protection and enforcement of trade marks under the Act would contribute to the accelerated introduction of new products and services, on the margin, holding other relevant factors constant. It could also lead to less general reliance on other quality signals, including the use of retailers' house marks, particularly in cases where retailing outlets are highly concentrated in a small number of firms. Thus there could be a basic shift in bilateral bargaining power away from retailers and towards producers. On the other hand, the market power of producers in specific instances might be reduced by specific limitations on the ability of producers to implement restricted marketing channels, where those restrictions relied heavily upon the trade mark licensing provisions.

The impact of strengthened trade mark protection and enforcement on horizontal market power is ambiguous. Where trade marks and associated advertising convey reliable information to consumers about product attributes and prices, the introduction of new products encouraged by strengthened trade mark protection would promote new entrants (especially those concentrating on higher quality) and foster stronger price competition among existing firms by making demand curves more elastic. On the other hand, where trade marks promote brand loyalty and less-elastic demand curves, their primary impact could be to strengthen barriers to entry and to reduce interfirm price competition.

Even when trade marks and brand-related advertising promote entry and mobility within industries, brand proliferation could lead to a sacrifice of extant scale economies at the product and, possibly, at the plant level. However, to the extent that stronger trade mark rights facilitate licensing and subcontracting of production activities, non-trivial efficiency gains might be obtained.

The major research requirements would therefore appear to centre upon the empirical identification of the relationship between trade mark protection and the behavioural and structural changes identified above.[1]

Some Suggested Empirical Studies

The dearth of empirical research on the impact of trade marks per se is due to the fact that the effects of trade marks are both general and specific, and most are the outcome of a general equilibrium process in which both economic behaviour and market structure are altered in potentially complex ways. While an attempt has been made in this study to identify these interactions in a conceptual context, there would seem to be great value in endeavouring to identify the major interactions inductively.

More specifically, it would be fruitful to isolate a small sample of industries in which the use of trade marks is of acknowledged importance as a competitive device.[2] Then a broad survey of selected suppliers and distributors might be undertaken to solicit their reactions to hypothesized changes in the scope of trade mark protection and enforcement. The main objective would be to identify indicated changes in the behaviour of suppliers and distributors and in the interaction between suppliers and distributors due to hypothesized changes in trade mark protection. For this purpose, it is important to assure coverage in the sample, in terms of a diversity of firm size, ownership characteristics (e.g., foreign versus domestically owned) and industrial concentration at the manufacturing and distributing levels. The anticipated outcome of this exercise is a detailed, although anecdotal, representation of the putative behavioural changes attending alterations in the Act. While all surveys carry the risk of response bias, the bias could presumably be mitigated to some extent by effective design of the

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1. In the remainder of this chapter, we suggest a number of complementary, albeit broad, approaches that might be taken to fulfill these requirements. Before proceeding, we caution that our mandate is not to detail research methodology, nor even to identify the data requirements involved. While we believe that the suggested projects are technically feasible, an evaluation of their merits in the context of limited resources is the subject of the next stage of research on this topic.

2. As noted in Chapter I, the use of trade marks is ubiquitous. The focus should therefore be on industries where trade marks are a primary vehicle for differentiating products. Identification of a sample will be somewhat arbitrary; however, consultation with trade mark lawyers, advertisers and marketing executives would probably provide a reliable topology. Where possible, statistics from the trade mark register indicating industry use of this facility would provide a check on the subjective responses.

survey instrument. Furthermore, a broad representation in the sample (along the lines identified above) would ensure that the bias did not emerge from the sampling procedure.

Consumer search costs. While some such survey approach is most appropriate for generating information to a set of simulated "what if?" questions, there are other important relationships already identified in the literature that are potentially amenable to more orthodox economic analysis. One relationship shown to be important in the present analysis is the impact of trade marks and brand-related advertising on consumer search and measurement costs. The standard approach to this issue can be found in the marketing literature. Typically, consumers are interviewed or tested in some way to determine whether they can identify significant differences among well-known brands of consumer products.[3] These tests have been inconclusive and do not provide a fruitful direction for further research. The fundamental issue is whether price differentials across trade-marked products (particularly convenience goods) are inconsistent with differences in product characteristics. That is, Do consumers systematically pay a premium for certain brands for any given set of attributes (including the consistency of quality) possessed by those brands? Were one to find that typically prices paid for goods are fair with respect to the attributes possessed by those goods, one could conclude that brand loyalty, however defined, is consistent with identifiable differences in product attributes.

An approach to relating product prices to measurable product attributes is provided by the technique of hedonic price equations. In this approach, prices for a class of product are related to a vector of product attributes through regression analysis. The estimated regression plane provides a measure of the marginal price premiums consumers are willing to pay, on average, for each of a set of defined product attributes.[4] Deviations around the estimated plane may be taken as a measure of brand preference, that is, price premiums or discounts that are unexplained by measurable product attributes. To be sure, such deviations may reflect an underspecified hedonic price equation (i.e., the omission of important attributes from the estimating equation). Thus the technique cannot reliably identify brand preferences as the concept is employed in criticisms of the advertising function. Nevertheless, the technique could be useful in comparing related product

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3. For one example of this approach, see Gary Mauser, "Allison and UHL Revisited: The Effects of Taste and Brand-name on Perceptions and Preferences," Simon Fraser University, Department of Economics and Commerce, Discussion Paper no. 78-4-2 (Burnaby, B.C., 1978).

4. An example of this technique as applied to the computer industry can be found in Robert Michaels, "Hedonic Prices and the Structure of the Digital Computer Industry," Journal of Industrial Economics 27 (March 1979): 567-85.

markets. For example, one might compare the variances around fitted regression planes for a set of convenience goods and, in turn, relate these variances to some measure of trade mark intensity. If one found smaller variances associated with goods relying more heavily upon trade mark use, all other things constant, there is a basis for concluding that trade mark use contributes to a closer statistical matching of product prices to product attributes. The latter, in turn, may be taken as an index of the spread of information across consumers in the relevant markets.

Vertical marketing restrictions and competition. The analysis in this study identified the relevance of trade mark protection to vertical marketing restrictions. The critical issues related to vertical marketing restrictions involve a potential trade-off between reduced competition and the mitigation of free rider problems. An empirical analysis of this trade-off might proceed along two dimensions. First, where marketing restrictions tied to trade mark licences are currently of concern, an examination of the relevant markets might be undertaken with a view to determining whether altering the nature and scope of the trade mark rights provided under the Act would significantly affect the position of market participants along the trade-off locus. Identification of relevant cases might be undertaken by referring to complaints registered with the Director of the Combines Investigation Branch, and by civil cases in which exclusive dealing or some other vertical restriction figured in the complaint. The object of this exercise would be to evaluate whether vertical marketing restrictions pose a general danger to competition or whether they are of concern only in restrictive and special circumstances.

The second dimension of this analysis is tied to the survey study discussed earlier in this chapter. It will be recalled that an anticipated result of the proposed survey is an indication of how marketing channels might be affected by changes in the extent and scope of trade mark protection and enforcement. Where the increased use of vertical marketing restrictions is an anticipated result, the insights obtained from the first part of this study (i.e., the general examination of exclusive dealing and other such arrangements) might be applied. More specifically, these findings would be employed to evaluate whether the anticipated marketing changes identified in the survey raise serious competition concerns in the markets affected.

Horizontal restrictions on competition. Perhaps the broadest overall concern about trade marks identified in the literature and in this study relates to the impact of trade marks and brand-related advertising on

barriers to entry and the mobility of firms within industries.[5] It was indicated in the analysis that this issue is tightly bound to the role of advertising as a source of information about product prices and attributes. The hedonic price equation research project described above offers one approach to addressing this broad issue. A complementary approach might involve examining the relationship between trade mark use and competition more directly.

It was emphasized in Chapter IV that the most promising research approach involves in-depth case studies of individual product markets. Given the magnitude and resource requirements of such an approach, it would seem appropriate to identify several product markets of greatest a priori interest and focus on those. Reference to the industrial organization literature and relevant studies undertaken under the Combines Act should facilitate this identification process. However, a potentially fruitful case study exists in the area of food and consumer household products. The introduction of generic goods for many of these products offers a laboratory in which the impact of established manufacturers' brands and retailers' house brands on the introduction of generics can be examined. As well, the extent of market power in Canada's retailing sector has been an important public policy issue for some time. A case study of the introduction of generic goods and household products could provide insight into the impact of changes in brand-name strength at the manufacturer's level on bilateral bargaining power in convenience goods industries.

Economies of scale and product differentiation. A final research issue concerns the relationship between trade mark use and economies of scale. More specifically, it was indicated in Chapter III that an important potential cost of brand proliferation is the sacrifice of available economies of scale in production. To the extent that trade mark protection promotes brand proliferation, it could contribute to some sacrifice of product scale economies. On the other hand, it was also indicated that trade mark protection could facilitate the reorganization of production -- for example, the subcontracting of production tied to trade mark licensing -- which could promote greater realization of product scale economies. It was further suggested that the simultaneous use of national manufacturers' brand names and private-label brands could promote the exploitation of extant plant-level scale economies by allowing manufacturers to fill out capacity.

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5. This focus on the impact of trade marks on entry conditions is consistent with the emergence of the contestable-markets paradigm in the industrial organization literature. The emphasis in this literature is on ease of entry and exit as the paramount measure of an industry's competitiveness. See, for example, W.J. Baumol, "Contestable Markets: An Uprising in the Theory of Industrial Structure," American Economic Review 72 (March 1982): 1-15.

As empirical issues, these potential impacts of trade mark protection and enforcement are important. It is not obvious, however, that they can be addressed through standard econometric tools such as the estimation of production functions. It does seem possible to tie the analysis to the survey project described earlier. That is, one could attempt to gain at least a qualitative appraisal of the importance of the relevant scale economy relationships by identifying those industries in which production patterns are significantly affected by trade mark use and then identifying the nature of the effects. Depending upon whether the relevant production impacts relate to product, plant or multiplant scale economies, one might then seek to evaluate the quantitative significance of these impacts by drawing upon engineering estimates of volume-unit cost relationships, or other available information on the extent of product, plant and multiplant economies of scale for those product groups where trade mark protection significantly influences the organization of production.[6]

Concluding Comments

The use of certification marks has not received prominent attention in this study, in part because many of the relevant issues overlap between trade marks and certification marks. Also, the trade mark institution figures far more prominently in the industrial organization literature. Nevertheless, there are several considerations that are of particular a priori concern with respect to certification marks, which might be addressed in specifically focused projects. One relates to the potential (noted in Chapter IV) for consumers to misperceive the objective information provided in certification marks. The available relevant studies have all been done for the United States. Since the studies rely upon standard marketing field survey techniques, it would not be difficult to replicate several of these studies for a few well-known certification marks in Canada.[7]

Another issue that might be addressed is whether certification marks have been or are being used by sponsoring groups to raise entry barriers for specific producers. This issue might be addressed by investigating the procedures employed by mark holders to license use of their marks in the case of several well-known certification marks in Canada.

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6. A prototype for such a study, as well as a source of background information on scale economies in selected industries, is F.M. Scherer et al., The Economics of Multi-Plant Operation (Cambridge: Harvard University Press, 1975).

7. For a prototypical study, see M.V. Jaric and Dan Sarel, "Consumer (Mis)Perceptions and Usage of Third Party Certification Marks, 1972 and 1980: Did Public Policy Have an Impact?" Journal of Marketing 45 (Summer 1981): 135-56.